SECTION IV
ENVIRONMENTAL CONSEQUENCES

4.1 LAND USE AND SOCIO-ECONOMIC IMPACTS

The following section addresses the anticipated land use and socioeconomic consequences of each of the STH 26 alternatives. Table 4.1 provides a summary of land use and socioeconomic impacts.

TABLE 4.1
SUMMARY OF LAND USE AND SOCIO-ECONOMIC IMPACTS

	SOUTH SEGMENT			CENTRAL SEGMENT							NORTH SEGMENT		
	No Build	S2	S3	No Build	C1	C2	C2(a)	C2(b)	C3	C4	No Build	N1	N2
Consistency with Local and County Land Use Plans	⊙	⊙	⊙	●	●	○	○	○	⊙	●	●	○	●
Significant Site-Specific Institutional Impacts	●	○	○	⊙	⊙	⊙	⊙	⊙	●	○	●	○	○
Agricultural Impacts	○	⊙	⊙	○	●	○	○	○	○	●	○	⊙	⊙
Community Access	⊙	○	○	○	⊙	○	○	○	○	●	⊙	○	●
Economic Impact on Existing Businesses	○	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	●	⊙	⊙	⊙
Servicing of Industrial Sites	⊙	○	○	●	⊙	⊙	⊙	⊙	⊙	●	●	○	●
Residential Neighborhood Impacts	●	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Residential / Business Relocations	0 / 0	47 / 2	11 / 2	0 / 0	9 / 2	5 / 3	5 / 4	10 / 5	13 / 1	6 / 0	0 / 0	19 / 7	24 / 6
Environmental Justice	○	○	○	○	○	○	○	○	○	○	○	○	○
Visual Resources Views of Road / From Road	○/⊙	●/⊙	⊙/○	○/⊙	⊙/○	⊙/○	⊙/○	⊙/○	⊙/⊙	⊙/○	○/⊙	⊙/○	●/⊙

Note: Symbols represent a relative scale from least beneficial/most negative effect to most beneficial/least negative effect. Each alternative is classified relative to the other alternative within the same segment of the corridor.

Legend: ● = Least beneficial/Most negative; ⊙ = Moderate Impact; ○ = Most beneficial/least negative

Methodology – Panel of Experts

The methodology for evaluating environmental consequences related to land use and socioeconomic impacts has involved utilization of a "Panel of Experts." This approach to evaluating the land use impacts of transportation projects is recommended in the WisDOT guideline document entitled *Land Use in Environmental Documents - Indirect and Cumulative Effects Analysis for Project-Induced Land Development – Technical Reference Guidance Document* (WisDOT, 1996).

The Panel of Experts included county and municipal planners and engineers, University of Wisconsin Cooperative Extension Service staff, local economic development professionals, and individuals representing the farming community, real estate developers, and environmental organizations. The process has incorporated a "Modified Delphi Technique" using a qualitative ranking of the impacts of alternatives.

The Panel of Experts has been used to identify some of the general impacts that could be expected from the highway alternatives. The Panel of Experts was asked to rank each individual alternative with respect to a number of socioeconomic and land use factors. The rankings were based on a range of 1 to 5 with 1 being the most negative/least beneficial and 5 being the most beneficial/least negative. The scores were totaled by the consultant team and translated into a set of general findings.

The Panel of Experts was a diverse group covering the entire study area. These individuals represented a broad range of interest groups and geographic areas. Individuals placed differing values on importance of impacts as they related to their own particular interest group. Some Panel of Experts members declined to rank individual alternatives due to unfamiliarity with the specific conditions related to each potential route and each community.

There was a consensus on some general findings and principals that should be used in the Environmental Impact Statement (EIS) process. These key findings of the Panel of Experts are as follows:

1. Nearly all of the municipalities and counties within the STH 26 Study Area have adopted land use plans. While there are some inconsistencies between some of the locally-adopted plans, nearly all of the adopted land use plans discourage nonagricultural development in rural areas and encourage development, particularly commercial and industrial development, within delineated long-range urban service areas or planned community growth boundaries.

   Note: All of the locally adopted plans utilize the concept of "long-range urban service areas.'' The term "long-range urban service area" is used by the Wisconsin Department of Natural Resources and other state and local agencies to describe the area within which public sanitary sewer and public water supply are expected to be available and in which "urban" development is planned to occur. Urban service area boundaries have generally been delineated based the projected demand for land for development purposes. While each community may have utilized slightly different methodologies to determine the project growth rates and urban service area boundaries, the general approach throughout the study area has been to base projected population growth on the Wisconsin Department of Administration "Official Municipal Population Projections 1990 – 2015" with adjustments based on growth rates since 1990.

2. Highway alternatives within or near to the long-range urban service areas or planned community growth boundaries generally have less land use impact on agricultural land and provide better community access.

3. Interchanges and signalized intersections tend to attract commercial development. When such areas are located outside of long-range urban service areas or planned community growth boundaries, they tend to be inconsistent with local land use plans.

4. Alternatives with safe and efficient highway access to both existing and planned industrial sites and industrial or business parks are most effective in terms of providing economic benefits and relieving the existing corridors of truck traffic.

5. Alternatives that follow 40-acre boundaries other than road frontages tend to have less farm severance and farmstead impact than alternatives that traverse diagonally through agricultural districts or align with roads.

6. The through-town alternatives in Milton, Jefferson, and Watertown would require a substantial number of business relocations, which would have adverse economic and community impacts.

7. The through-town alternatives in Milton, Jefferson, and Watertown would tend to be disruptive to residential neighborhoods and create barriers to both pedestrian and traffic flow between residential neighborhoods and community activity areas such as downtowns and institutions such as schools, churches, and parks.

8. The location of highway corridors within or near existing residential neighborhoods would tend to create nuisances due to noise, visual impact, and light. These impacts would reduce the desirability of such neighborhoods and could impact property values.

9. In areas of proposed highway corridors, local and county plans that have not anticipated these roads may have to be revised.

10. The Panel of Experts did not identify any high indirect or cumulative impacts of particular concern.

The following section incorporates both the findings of the Panel of Experts and the technical findings of the consultant team, as they relate to land use and socioeconomic impacts for each of the individual highway alternatives.

4.1.1 Consistency with Local and County Land Use Plans

Table 4.1.1 summarizes the land use plans for the various municipalities in the study area. In general, the bypass alternatives within or adjacent to long-range urban service areas tend to be the most consistent with local land use plans. These alternatives do not create new interchanges or major intersections in rural areas that are planned for long-range agricultural preservation. In addition, alternatives located closer to urban service areas generally provide the most convenient access to both existing and planned industries, businesses and services within the communities.

The bypass alternatives near urban service area boundaries are also generally more consistent with local land use planning than the through-town alternatives; they have less impact on existing residential neighborhoods and do not create pedestrian and other mobility or travel access “barriers” within the communities. The through-town alternatives generally require right-of-way widening that would cause business relocations and disrupt existing business districts. The through-town alternatives would pose a threat to historic structures or sites in the older areas of communities.

In all of the incorporated municipalities where bypasses or improvements are proposed, the improvements are more consistent with local plans than the No-Build Alternative. The existing STH 26 corridor alignment routes through-traffic, including truck traffic, through the central portions of Milton, Jefferson, and Watertown. This through-traffic and congestion is disruptive to pedestrian movements and cross-town circulation. Most of the incorporated communities in the STH 26 study area have incorporated STH 26 improvements into their local land use plans. Nearly all of the local plans within the study area call for regional highway improvements as a means of improving the local economies and providing better access to the Interstate Highways. The No-Build Alternative would fail to address issues related to both congestion and enhanced regional transportation facilities.

TABLE 4.1.1
EXISTING PLANNING FRAMEWORK

Municipality	Current Land Use Plan	Zoning Ordinance
Rock County	Comprehensive Development Plan, in Progress	1999
City of Milton	City of Milton Comprehensive Master Plan, 1999	1976 - Revised 1998
City of Edgerton	Revised Master Plan, 1995	1997
City of Janesville	City of Janesville General Development Plan, 1989	1981
Town of La Prairie	Plan in Progress	1996
Town of Lima	General Development Guide - 1975	1980
Town of Milton	Town of Milton Land Use Plan, 1999	1979, Revised 1999
Town of Rock	Plan in Progress	1987
Jefferson County	Jefferson County Agricultural Preservation and Land Use Plan, 1999	1975
City of Fort Atkinson	Fort Atkinson Master Plan, 1997	1993
City of Jefferson	City of Jefferson Comprehensive Master Plan, 1998	1998
City of Lake Mills	City of Lake Mills Master Plan, 1998	1991
City of Waterloo	City of Waterloo Land Use Plan, 1995	1995
City of Watertown	City of Watertown Comprehensive Master Plan, 2000	1968
Village of Johnson Creek	Village of Johnson Creek Comprehensive Master Plan, 1999	1996
Village of Palmyra	Village of Palmyra Land Use Plan, 1994	1995
Village of Sullivan	Village of Sullivan Economic Development Plan, 1989	1989
Town of Lake Mills	Follows County Plan	County Zoning
Town of Milford	Follows County Plan	County Zoning
Town of Oakland	Comprehensive Growth Plan, 1997	County Zoning
Town of Palmyra	Follows County Plan	County Zoning
Town of Sullivan	Follows County Plan	County Zoning
Town of Sumner	Town of Sumner Long Range Plan, 1997	County Zoning
Town of Waterloo	Follows County Plan	County Zoning
Town of Watertown	Follows County Plan	County Zoning
Dodge County	Dodge County Plan, 1999	1999
Village of Clyman	No Plan	1977
Village of Hustisford	Plan 1976 – Inactive	1999
Village of Lowell	No Plan	1994
Village of Reeseville	No Plan	1991
Town of Lowell	Follows County Plan	No Zoning
Town of Shields	No Plan	Follows County Plan

Source: SmithGroup JJR, 2000.

4.1.1.1 South Segment

In the South Segment from Janesville to the south side of Fort Atkinson, the primary land use impacts are related to the Milton Bypass. Alternatives S2 and S3 bypass around the south and east sides of Milton. Alternatives S2 and S3 join the existing corridor approximately 3.2 miles (5.2 kilometers) north of the existing City limits. All of the alternatives under consideration maintain STH 26 in its existing alignment through the rural areas between Janesville and Milton and between Milton and Fort Atkinson.

The No-Build Alternative is inconsistent with the *City of Milton's Comprehensive Master Plan*. The No-Build Alternative would result in continuation of high levels of both automobile and truck through-traffic in the older, established portion of the community. This traffic is disruptive to residential neighborhoods and creates a major barrier to both pedestrian and vehicular traffic movements in the community. The continuing nuisance factors associated with the routing of STH 26 through the central part of the community would have long-range negative impacts on neighborhood and business district development.

Alternative S2 uses the existing four-lane section of STH 26 between CTH Y north of Janesville and Town Line Road south of Milton. It then bypasses the City of Milton south and east of the existing STH 26 alignment before it crosses STH 26 in Milton and travels west of STH 26. North of Milton, the

alignment crosses STH 26 and travels east of STH 26 before rejoining existing STH 26 north of CTH N. Alternative S2 would cross through the planned Northside Residential Neighborhood area that is located between the existing STH 26 corridor and John Paul Road. *The City of Milton Comprehensive Master Plan* indicates that this future planned neighborhood area includes approximately 300 acres of future development land. There will be a mixture of uses including residential, community park, retail, office, and institutional uses. The City's plans for the Northside Residential Neighborhood would need to be revised to take into consideration Alternative S2.

Alternative S3 uses the existing four-lane section of STH 26 between CTH Y north of Janesville and Town Line Road south of Milton. It follows a route similar to Alternative S2 around the south and east side of Milton, but then continues northerly staying east of the current STH 26 alignment. Alternative S3 joins existing STH 26 approximately 2.8 miles (4.5 kilometers) north of the City's long-range urban service area boundary. Alternative S3 affects substantially less area within the City's long-range urban service area. It would impact existing rural residential subdivisions (The Reserve and Oak Ridge Estates) and other rural residences northeast of the City.

Alternative S3 was selected as the Preferred Alternative. The 3.9-mile (6.3-km) section of STH 26 from CTH Y north of Janesville to just south of STH 59 East in Milton was improved in 1999 from a two-lane rural roadway to a four-lane divided highway having expressway access standards. Additional lanes or capacity improvements for this section are not part of this project, but access modifications are planned for this section that will preserve the functionality of the highway and will permit the route to operate safely as traffic volumes increase. Access north of CTH Y would be managed and focused to two future full access locations, one at or near McCormick Road and the other at Harmony Town Hall Road. Janesville, Milton, and Town of Harmony agree with these planned access locations.

An access location near McCormick Road is consistent with Janesville's plans. The city has expressed a preference for an at-grade signalized intersection at this location as part of the preferred alternative. Given the expectation of growth in residential and commercial uses in this area, WisDOT believes an interchange will have greater safety and mobility benefits, and will be the best solution for access to STH 26. An interchange near McCormick Road is included in this EIS as part of the Preferred Alternative as a long-term improvement and is shown on Exhibit 8. This decision will be reviewed at the time of design in cooperation with the city of Janesville to confirm that it is still the most appropriate solution, and a reevaluation of associated environmental consequences will be made if needed. An interchange will create possible near term disruptions to existing businesses in the McCormick Road area, but in the long term, adjacent properties and the community will be better served with an interchange, from a safety and capacity standpoint.

Also long term, it is expected that the existing developed abutting properties along STH 26 south of McCormick Road will not have direct access to the highway. A frontage road design has been included in this EIS for the north side of the highway in this area, recognizing at the time of design another approach may be more suitable depending upon the kind of changes that have or are expected to occur in this area. While construction in this area is not anticipated for several years, WisDOT will work with Janesville on early design in the area so as not to preclude desirable options for the future, and to allow property owners to redevelop in accordance with a long-range plan. A reevaluation of environmental consequences will be made in this area if needed.

Janesville, Milton, and Town of Harmony have developed an agreement among the three communities and passed individual resolutions supporting a full diamond interchange in the vicinity of Harmony Town Hall Road, and supporting the concept that land uses in this area remain non-commercial and exist as a

community separation between Janesville and Milton. Copies of the agreement and resolutions are in Appendix B. These agreements minimize possible indirect impacts that would be inconsistent with community goals for the future. WisDOT will work to assist area communities in the development of roadway infrastructure consistent with area land use plans.

A new interchange at Klug Road was eliminated from the Preferred Alternative due to insufficient traffic volumes. A frontage road connecting Klug Road with Bower's Lake Road was included for local access.

Local Government Position Statements

The City of Milton's Administrator has submitted a letter, dated December 9, 1999, indicating that the Milton City Council favors Alternative S3, providing the alternative would include three interchanges. The City Council letter indicates that Alternative S3 would have the least adverse impact to both existing and planned growth areas within the City. The three interchanges favored by the City include an interchange on the south side of the City immediately north of Bingham Road, an interchange near the Eastside Industrial Park at STH 59, and an interchange north of the City near Klug Road (See Appendix A). The City of Milton submitted a resolution on June 21, 2000 (See Appendix A) supporting Alternative S3, and requesting an interchange or signalized intersection near Townline Road on the south boundary of the city.

The City of Milton Planning Consultant has also provided a letter, dated February 10, 2000, indicating that Alternative S3 is the most consistent with the City's past planning efforts and would have the least adverse impact on the community (See Appendix A).

The Milton Town Board has submitted letters, dated September 15, 1999, and January 17, 2000, indicating that the Town Board supports Alternative S2 (formerly identified as Alternative 1E1). The Town of Milton would like to remain rural. The Town has indicated that Alternative S2 would do the most to preserve existing farmland and farmsteads; prevent erosion of the tax base; and prevent disruption of existing rural residential developments. (See Appendix A)

The Rock County members of the STH 26 Task Force, the Milton Town Board and Task Force, and the Harmony Town Board and Task Force submitted a letter, dated March 13, 2000, indicating support for Alternative S2 with some modifications. (See Appendix A)

Janesville, Milton, and Town of Harmony have developed an agreement dated October 5, 2004, among the three communities and passed individual resolutions (September 21, 2004; September 27, 2004; and October 4, 2004) supporting a full diamond interchange in the vicinity of Harmony Town Hall Road, and supporting the concept that land uses in this area remain non-commercial and exist as a community separation between Janesville and Milton. (See Appendix B)

4.1.1.2 Central Segment

In the Central Segment from Fort Atkinson to the south side of Johnson Creek, the primary land use impacts are related to the Jefferson Bypass. Alternative C1 (far west), C2, C2(a), and C2(b) (near west) are west side bypasses and Alternatives C3 (near east) and C4 (far east) are east side bypasses. All of the proposed alternatives utilize the existing STH 26 Bypass around the City of Fort Atkinson and rejoin the existing alignment north of the City of Jefferson.

The No-Build Alternative is inconsistent with the recently adopted City of Jefferson Comprehensive Master Plan and the Jefferson County Agricultural Preservation and Land Use Plan in that it does not address regional transportation and economic needs. Nor would the No-Build Alternative address traffic congestion, truck routing, and cross-town mobility, all of which are issues identified in the City of Jefferson Comprehensive Master Plan.

Alternatives C1 and C4, which extend outside the City of Jefferson's long-range urban service area, are the least consistent with the local land use planning because of their impact on agricultural preservation and the distance of the interchanges with USH 18 from the City of Jefferson. Alternatives C1 and C4 would result in loss of farmland and farm severances in areas planned for long-range agricultural preservation. Both alternatives would create interchanges with USH 18 that are relatively far from existing development areas.

Alternatives C2, C2(a), C2(b), and C3 are generally more consistent with adopted land use plans because all routes are within or near the long-range urban service area boundary of the City of Jefferson. While C2, C2(a), C2(b), and C3 would impact existing farmland, most of the impacted farms are within the City's long-range urban service area and are proposed for future development. While *the City of Jefferson Comprehensive Master Plan* does not specify a single favored bypass route, the City Plan Commission and City Planner have indicated that the City considers Alternatives C2, C2(a), and C2(b) (near west side) the most consistent with previous City planning.

Alternatives C1, C2, C2(a), and C2(b) bisect the 645-acre Jefferson County Farm Property on the southwest side of the City of Jefferson and would impact some of the site planning that has occurred on that site. While this property is currently in the Town of Jefferson, both the *Jefferson County Agricultural Preservation and Land Use Plan* and the *City of Jefferson Comprehensive Master Plan* indicate that this area is within the long-range urban service area of the City of Jefferson and is likely to be developed at some point in the future. The Jefferson County Economic Development Corporation retained the Planning and Design Institute and the Department of Urban and Regional Planning at the University of Wisconsin-Madison to prepare a land use plan study entitled Countryside Farm Study. If C1, C2, C2(a), or C2(b) were selected, the concept development plan for the Jefferson County Farm Property would need to be revised. A letter dated February 3, 2000 (see Appendix A) from John Weiss, Chair, Jefferson County Planning and Zoning Committee, indicates that Alternatives C1, C2, C2(a), or C2(b) would "have significant negative impacts on the vision and priority program elements developed over the past four years."

Alternative C2(a) was selected as the Preferred Alternative.

Local Government Position Statements

The City of Jefferson Plan Commission has submitted a letter dated December 9, 1999 supporting a near west alternative (see Appendix A). The letter indicates that growth on the east side of the City is likely to be limited by lack of developable space and difficulty connecting with public utilities. The Commission observes that there is more opportunity for growth on the west side and therefore an alternative on the near west side could serve more development. In addition, a key concern of the Plan Commission is the close proximity of Alternative C3 to the St. Coletta School and associated out buildings.

The Town of Farmington has also submitted a letter, dated December 2, 1999, indicating that a near west bypass would be most consistent with the Town of Farmington Land Use Plan. (See Appendix A)

The Town of Aztalan submitted a letter dated March 9, 2000 opposing any bypass route that would go through the Town of Aztalan. The Town of Koshkonong submitted a response letter dated May 26, 2000, indicating support for near west Jefferson bypass Alternative C2(b). (See Appendix A)

4.1.1.3 North Segment

The North Segment extends from Johnson Creek to north of Watertown. The primary land use impacts in the North Segment are related to the proposed bypass around the City of Watertown. Alternative N1 is a west side bypass and Alternative N2 is an east side bypass. Both the alternatives utilize the existing STH 26 alignment from Baneck Lane to the south side of the City of Watertown and rejoin the existing STH 26 alignment north of the City of Watertown.

The No-Build Alternative is inconsistent with the recently adopted *City of Watertown Comprehensive Master Plan*, the *Jefferson County Agricultural Preservation and Land Use Plan*, and *the Dodge County Plan* in that it does not address regional transportation and economic needs. Nor would the No-Build Alternative address traffic congestion, truck routing, and cross-town mobility, all of which are issues identified in the *City of Watertown Comprehensive Master Plan.*

Alternative N1 is consistent with the City of *Watertown Comprehensive Master Plan* and is supported by City of Watertown officials. This route will serve both the expanding residential and industrial districts on the west side of the City. The route is within the City's long-range urban service area and farmland impacted by the route is in areas planned for long-range urban development.

Alternative N2 is less consistent with City of Watertown planning. While portions of the road would utilize existing STH 16 right-of-way, Alternative N2 would create a new eastside interchange outside the City's long-range urban service area boundary that could potentially stimulate development in areas planned by Jefferson County for rural preservation.

Alternative N1 was selected as the Preferred Alternative.

Letters of Support

The City of Watertown has passed a Resolution, dated March 10, 2000, declaring the City's official support for a west side bypass. The City of Watertown City Planner has provided a similar letter of support, dated January 14, 2000. Alternative N1 would enhance access to the planned west side residential neighborhoods and to the planned commercial and industrial districts along STH 19. (See Appendix A)

The Town of Watertown Board submitted a letter, dated March 16, 2000, supporting a Through-Town Railroad Corridor Alternative that utilizes a combination of the existing STH 26 corridor and portions of the railroad corridor west of downtown Watertown. The Town of Watertown Board submitted a second letter dated, May 18, 2000, stating "an official request that the Central Railway Corridor be looked at fully and studied intensely along with the updated alternatives that have been sent concerning the interchanges. It is in the Town's best interest to have the Bypass go along this route so as not to use valuable farmland and to make the route as viable as possible for the City's downtown and the Township (See Appendix A). The Through-Town Railroad Corridor Alternative favored by the Town of Watertown fails to meet the basic transportation objectives for STH 26 improvements and has not been an alternative carried forward to the Draft Environmental Impact Statement stage.

4.1.2 Institutional Impacts

Institutional impacts are impacts related to schools, churches, museums, institutional care facilities, and government facilities. Institutional impacts can include both direct impacts due to loss of property, noise, and other environmental impacts and indirect impacts associated with access.

4.1.2.1 South Segment

With the No-Build Alternative, traffic would continue routing on the existing STH 26 alignment past the Milton House museum and East Elementary School. The No-Build Alternative would perpetuate some of the existing circulation and congestion problems and continue routing traffic through the community in a manner that divides the community and impedes safe internal circulation between residential neighborhoods and nearby institutions, particularly East Elementary School and the High School and Middle School, which are located west of the existing STH 26 corridor.

Alternatives S2 and S3 are routed east of the existing STH 26 corridor to minimize impacts to the Milton House museum and other key institutions in the community. Diversion of traffic to bypasses would result in a benefit to institutions located along existing STH 26 in Milton due to a reduction in traffic volumes including trucks.

Alternative S3 was selected as the Preferred Alternative. The 3.9-mile (6.3-km) section of STH 26 from CTH Y north of Janesville to just south of STH 59 East in Milton was improved in 1999 from a two-lane rural roadway to a four-lane divided highway having expressway access standards. Additional lanes or capacity improvements for this section are not part of this project, but access modifications are planned for this section that will preserve the functionality of the highway and will permit the route to operate safely as traffic volumes increase. Access north of CTH Y would be managed and focused to future interchange locations near McCormick Road and Harmony Town Hall Road.

As part of the planned improvements for the Preferred Alternative, overpass structures will be constructed at an interchange near McCormick Road, a future Wright Road location, an interchange at Harmony Town Hall Road, Town Line Road, and Henke Road to facilitate local access to and from schools, churches, and other local institutions in Milton. Overpass structures will also be constructed along the east bypass of Milton at new STH 59, old STH 59, Storr's Lake Road, and Bower's Lake Road to facilitate local access to and from schools, churches and other local institutions in Milton.

4.1.2.2 Central Segment

In the City of Jefferson, the No-Build Alternative would impact a number of community institutions by continuing the pattern of separating neighborhoods from schools, churches and other local institutions. In particular though-traffic on the existing STH 26 corridor separates both the Jefferson High School and Middle School, both of which are on the west side of the City, from the majority of the residences, which are located east of STH 26. The current alignment is routed in front of both the County Courthouse and City Hall and contributes to overall pedestrian safety problems and congestion that adversely impact these institutions.

The primary institutions that could be directly impacted by the Central Segment build alternatives are St. Coletta's School, located on the east side of the City of Jefferson, the Jefferson County Farm Property located on the southwest side of the City of Jefferson, and a church located on the west side of the City.

The church located on USH 18 would have to be relocated under Alternative C2(b) for the construction of the interchange.

Institutions impacted by the alternative highway alignments include the Jefferson Middle School and High School campuses and a church which are located on the City's west side, and some of the churches and elementary schools that are adversely impacted by the current STH 26 alignment through the central portion of the City. Alternatives C1, C2, C2(a), and C2(b) would not directly impact the fairgrounds or schools, but any of these routes would provide enhanced access.

In the City of Fort Atkinson, the recently constructed Fort Atkinson High School is near the existing STH 26 bypass corridor on the west side of the City. Converting the bypass to four lanes and restricting access at Hoard Road and Banker Road could have an effect on school bus routing. The City of Fort Atkinson Municipal Airport, located on the northeast side of Fort Atkinson could be impacted by closure of Airport Road, which could occur under Alternatives C2, C2(a), C2(b), C3, and C4. Alternatives C2, C2(a), and C2(b) have the option of following the alignment of C1 through this area, which would avoid the closure of Airport Road.

St. Coletta's School

St. Coletta's School, a private facility serving people with developmental disabilities, is located on the east side of the City of Jefferson approximately one mile (approximately 1.6 kilometers) east of the existing STH 26 corridor. Many of St. Coletta's clients live at or near the campus and walk along USH 18 between the City and the school campus.

The west side bypasses and the No-Build Alternative would not impact St. Coletta's School.

The Alternative C3 corridor and interchange would divide the St. Coletta campus and pose potential pedestrian safety concerns for residents and employees. The St. Coletta greenhouse would have to be relocated. The campus would likely lose much of its "rural character" if a major roadway divided it.

Alternative C4, which is located east of the St. Coletta's School, would indirectly impact the campus due to increased traffic traveling on USH 18 between the east interchange and the City of Jefferson.

Jefferson County Farm Property

The west side bypasses, Alternatives C1, C2, C2(a), and C2(b) could affect access to a number of institutional uses located on the Jefferson County's Farm Property. These institutions include the Jefferson County Human Services Department, Health Department, Elderly Services, the County's Countryside Home, and University of Wisconsin Extension offices. Jefferson County has considered locating additional institutional uses on the site including a community based residential facility for adolescents, medical clinics to support assisted housing, a county highway garage complex, and a new Human Services Department building. The west bypass alignments would potentially use land that could otherwise be used to develop County facilities.

Alternative C2(a) was selected as the Preferred Alternative. This alternative also includes the following the alignment of C1 in the area of the Fort Atkinson Municipal Airport and avoids the closure of Airport Road. Overpass structures will be constructed at Banker and Hoard Roads to facilitate local access and school bus routing.

4.1.2.3 North Segment

The primary institutions that could be impacted in the North Segment are the various schools, churches, and the institutions located in the City that would be adversely impacted by failure to construct a bypass that would route through-traffic around the City.

Both Alternatives N1 (west side alternative) and N2 (east side alternative) would have a beneficial impact in terms of removing through-traffic that currently causes congestion and creates a barrier to cross-town circulation. Alternative N1 could provide enhanced access to both Watertown High School and Maranatha Baptist College, which are located on the City's west side and could be accessed via the Highway 19 interchange.

Alternative N1 was selected as the Preferred Alternative.

4.1.3 Agricultural Impacts

A general discussion of agricultural impacts below is followed by a more specific discussion of impacts for each alternative.

Primary agricultural impacts include loss of farmland or farm buildings due to roadway and interchange construction; the severance of farms such that a portion of the farm is inaccessible or a farmer must cross the road to conduct routine farm operations; highway runoff to prime agricultural soils; increased noise levels; and reduced air quality.

Potential indirect impacts to agricultural land include more difficult farm-market connections in urban and rural areas; changed land value; reduced farm productivity; and potential loss of farmland from residential or commercial development that may occur, in part, due to improved highway access.

An Agricultural Impact Statement (AIS) has been prepared to assess the potential environmental consequences of the Preferred Alternative on the nearby farm operations. In accordance with standard AIS procedure, copies of the completed AIS were sent to all farm operators in the project corridor. See Appendix C for an executive summary of the AIS. A copy of the full AIS is available at the WisDOT Transportation District 1 office in Madison.

In accordance with the Farmland Protection Policy Act, Farmland Conversion Impact Rating Forms (AD-1006) have been completed and are located in Appendix A. The impact rating evaluates the proposed conversion of farmland to highway uses.

Under the No-Build Alternative, no farmland would be converted to non-agricultural use. Increased traffic congestion along the existing 2-lane highway in rural areas may impact farming operations. Transporting goods and services for farmers would weaken as travel time increases. Residents along the highway have expressed concern regarding their safety as they travel along and cross the existing roadway. As congestion worsens, conflicts between the adjacent farming operations and the through traffic will occur more frequently.

Depending on the alternative combination chosen, between 1059 acres (428 ha) and 1520 acres (615 ha) of farmland would be taken along the entire project length. The United States Department of Agriculture, Natural Resources Conservation Service determined that between 846 acres (342 ha) and 1342 acres (543 ha) of this is prime and unique farmland. This shows that more than 75 percent of the farmland

acquisition is classified as "prime" farmland under the Farmland Protection Policy Act. Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed corps. In general, prime farmland in Wisconsin:

Typical Existing STH 26 Farmland Strip Impacts

- Has an adequate and dependable water supply from precipitation or irrigation
- Has a favorable temperature and growing season
- Has acceptable acidity or alkalinity
- Has few or no rocks
- Is permeable to air and water
- Is not excessively erodible
- Is not saturated with water for long periods of time
- Does not flood frequently, or is protected from flooding

All build alternatives would sever farm parcels. These severances could create irregularly shaped fields and divide the farm residence and/or buildings from farm fields. This could increase the cost of working such fields, create new access problems, and possibly create drainage, safety, weed, and litter problems. Change in property access could require farmers to travel along or across the new roadway and/or farther distances to work fields. Farmers hauling equipment or driving large machinery will need to cross two lanes of traffic, stop in the median, and continue across the other two lanes when the traffic is clear. The median is proposed to be 60 feet (18 m) wide, which would accommodate most farm machinery crossings.

Many of the bypass alternatives are within approved urban service areas. Urban service areas are planned for urban growth and services typically within a twenty-year period. Farmland within an approved urban service area will typically be converted to non-farm uses within twenty years.

Many farm operations would be impacted by losing a strip of land along existing STH 26 for widening the current right-of-way. The photograph above shows a typical rural stretch of STH 26 where farm impacts might be limited to a strip along the existing road. This strip right-of-way acquisition would vary in size along the route depending on the existing topography and the proposed centerline alignment.

4.1.3.1 South Segment

Table 4.1.3.1 summarizes agricultural impacts to the South Segment including total acres required, farms impacted, new severances, impacted farms along existing STH 26, impacted farms inside of urban service area, and percent of prime farmland. The No-Build Alternative does not require any conversion of farmland to highway right-of-way.

TABLE 4.1.3.1
SOUTH SEGMENT FARMLAND IMPACT SUMMARY

Alternative	Total Acres (ha) Required	Farms Impacted	New Severances	Impacted Farms Along Existing STH 26	Impacted Farms Inside USA*	Total Acres (ha) Prime Farmland
S2	307 (124)	30	8	17	9	270 (109)
S3	315 (127)	31	7	17	7	275 (111)

* USA – Urban Service Area

Alternatives S2 and S3 would require comparable amounts of existing farmland, but much of the existing agricultural land affected by Alternative S2 is planned for residential and industrial use. Therefore, Alternative S2 would affect less agricultural land in the long-term.

Alternatives S2 and S3 include the same interchange at STH 59 that is located on existing agricultural land that is planned for industrial use as designated by the *City of Milton Comprehensive Master Plan*. Alternative S2 has an interchange along Bowers Lake Road that would displace agricultural land; this area has been designated for residential use.

Alternative S3 includes an interchange immediately north of the City of Milton on the east side of the corridor. The Alternative S3 interchange area could receive strong market pressure for commercial development, leading to the conversion of additional farmland in the Town of Milton.

Both alternatives would have a diamond interchange at CTH N. Unplanned commercial development could occur near the interchange. This interchange development and the expansion of the existing corridor to 4-lanes through the Towns of Milton and Koshkonong would require the conversion of agricultural land to highway right-of-way.

All of the South Segment alternatives continue north along the existing STH 26 with expansion to four lanes. The area surrounding the portion of the roadway within the Town of Milton includes a mixture of environmental corridor and exclusive agricultural land use. The Town of Koshkonong Land Use Plan indicates that the Town plans to maintain the area surrounding STH 26 as a mixture of residential, environmental corridor and agricultural use. Expansion of STH 26 to four lanes would require use of some of this land for highway right-of-way.

Alternative S3 was selected as the Preferred Alternative. Based on comments from review agencies, the two detailed study alternatives, S2 and S3, were modified from north of Milton to CTH N. In order to reduce impacts to the Otter Creek Springs natural area, the proposed interchange at CTH N was moved approximately 2,000 feet (610 m) to the east of existing STH 26. This resulted in an increase in agricultural land impacts, but a reduction in impacts to higher functional value wetlands, an avoidance of the Otter Creek Springs natural area, and a reduction in impacts to homes along existing STH 26. The Preferred Alternative S3 incorporates this modification.

The 3.9-mile (6.3-km) section of STH 26 from CTH Y north of Janesville to just south of STH 59 East in Milton was improved in 1999 from a two-lane rural roadway to a four-lane divided highway having expressway access standards. Additional lanes or capacity improvements for this section are not part of this project. Access modifications are planned for this section that will preserve the functionality of the

highway and will permit the route to operate safely as traffic volumes increase. Access north of CTH Y would be managed and focused to future interchange locations near McCormick Road and Harmony Town Hall Road. These access modifications, including relocation or extensions of local roads and new frontage roads will require the conversion of agricultural land to highway right of way.

McCormick Road is within the city limits of Janesville. Harmony Town Hall Road is in the Urban Service Area boundaries of Milton, and is expected to be within the city limits of Milton or Janesville by the design year of this EIS. Janesville, Milton, and Town of Harmony have developed an agreement among the three communities and passed individual resolutions supporting a full interchange in the vicinity of Harmony Town Hall Road, and supporting the concept that land uses in this area remain non-commercial and exist as a community separation between Janesville and Milton. Copies of the agreement and resolutions are in Appendix B. These agreements will minimize the potential land development impacts of an interchange.

An interchange originally proposed north of Milton at Klug Road was eliminated as part of the Preferred Alternative as traffic counts in the area did not justify construction of an interchange at this location.

Minor alignment shifts were made to the Preferred Alternative to further minimize overall environmental impacts. See Table 2.4 for a summary of the Preferred Alternative impacts.

4.1.3.2 Central Segment

Table 4.1.3.2 summarizes agricultural impacts to the Central Segment. The No-Build Alternative does not require any conversion of farmland to highway right-of-way and therefore it is likely to have minimal agricultural impact. The No-Build Alternative does not relieve downtown traffic and therefore it could impede farm to market connections in the Central Segment region.

TABLE 4.1.3.2
CENTRAL SEGMENT FARMLAND IMPACT SUMMARY

Alternative	Total Acres (ha) Required	Farms Impacted	New Severances	Impacted Farms Along Existing STH 26	Impacted Farms Inside USA*	Total Acres (ha) Prime Farmland
C1	438 (177)	27	9	7	13	430 (174)
C2	360 (145)	24	8	9	16	355 (144)
C2(a)	354 (143)	22	5	9	14	349 (141)
C2(b)	346 (140)	22	4	9	14	344 (139)
C3	338 (136)	23	6	11	16	291 (118)
C4	374 (151)	28	8	3	16	343 (139)

* USA – Urban Service Area

Alternatives C1 and C4 would require the greatest amount of farmland conversion to highway right-of-way and would generate the most impacts due to farm severances. Alternatives C2, C2(a), C2(b), and C3 would involve conversion of farmland to highway corridor, but most of the converted farmland is located within the urban service area and is planned for future nonagricultural uses.

Interchange and alignment construction of Alternatives C1, C2, C2(a), and C2(b) would require conversion of a portion of the Jefferson County Farm property that is currently in agricultural use. This land is located within the urban service area and is planned for future nonagricultural uses.

Alternative C1 includes an interchange at the intersection of USH 18 that would impact farmland by requiring additional land conversion for the interchange right-of-way. This interchange would potentially stimulate market pressure for the conversion of additional farmland near the interchange to highway-oriented commercial development. Alternatives C2, C2(a), and C2(b) also include an interchange at USH 18, but these interchanges are located closer to the City of Jefferson than Alternative C1. Construction of these interchanges would require converting farmland that is located in a floodplain to highway right-of-way.

Alternatives C3 and C4 would also potentially stimulate market pressure for the conversion of additional farmland near the USH 18 interchange to highway-oriented commercial development. Much of the land in this area is owned and occupied by St. Coletta of Wisconsin.

Alternative C2(a) was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. As a result of these shifts, the amount of farmland converted to right-of-way was reduced slightly. See Table 2.4 for a summary of the Preferred Alternative impacts.

4.1.3.3 North Segment

Table 4.1.3.3 summarizes agricultural impacts to the North Segment. The No-Build Alternative does not require any conversion of farmland to highway right-of-way. The No-Build Alternative does not relieve downtown traffic and therefore it could impede farm to market connections in the North Segment region.

TABLE 4.1.3.3
NORTH SEGMENT FARMLAND IMPACT SUMMARY

Alternative	Total Acres (ha) Required	Farms Impacted	New Severances	Impacted Farms Along Existing STH 26	Impacted Farms Inside USA*	Total Acres (ha) Prime Farmland
N1	767 (310)	80	13	60	12	637 (258)
N2	415 (167)	83	5	67	15	285 (115)

* USA – Urban Service Area

Alternative N1 would have the greatest primary agricultural impact on existing farmland, but all of the converted farmland is within the City's long-range urban service area and is planned for nonagricultural uses. Alternative N2, particularly the east side interchange, would affect more farmland outside the City's urban service area. The east side interchange for Alternative N2 is outside the City's planned urban service area and could stimulate loss of farmland due to commercial development.

Alternative N1 was selected as the Preferred Alternative. The size and configuration of the north interchange for Watertown was modified as part of the Preferred Alternative. This modification results in an overall reduction of about 75 ac (30 ha) of agricultural land in that area. Minor alignment shifts were

made to further minimize overall environmental impacts. See Table 2.4 for a summary of the Preferred Alternative impacts.

4.1.4 Transportation and Community Access

All of the build alternatives would reduce congestion and travel time, enhance safety, and provide an adequate level of service for forecasted traffic volumes along STH 26. All improvement alternatives would provide a minimum uninterrupted travel speed of 55-mph for traffic on the new facility. As discussed in Section 2, the No-Build Alternative would not meet the purpose and need for these objectives, nor would it improve local mobility for the communities. The build alternatives may affect some of the local rural mobility by causing some modification of travel.

Inter city public transportation facilities or alternative motorized transportation modes cross the project corridor but are not available for travel within the project corridor. Therefore, the build alternatives would not directly impact such services. The local area is dependent upon STH 26 as a link providing access to these alternative facilities outside the project area. Expanding STH 26 from two to four lanes would improve travel time, access, and safety to and from regional airports, inter city bus, and rail facilities.

The build alternatives maintain the continuity of existing bicycle routes by use of grade separation to cross the new STH 26 roadway or relocation of the bike route to a parallel route. The Jefferson County Glacial River Trail south of Fort Atkinson would be maintained in its existing corridor with a slight adjustment to the west near the Rock/Jefferson County line.

Access modifications are planned for the section of STH 26 between Janesville and Milton as part of the Preferred Alternative. These modifications will result in a change of local access and travel patterns for this area. Access to and from STH 26 will be focused at two full access locations, one at or near McCormick Road, and one near Harmony Town Hall Road. In addition, overpass structures will be constructed at Wright Road, Town Line Road, and Henke Road to facilitate safe local access and mobility from one side of STH 26 to the other side.

4.1.4.1 Highways

Traffic forecasts for the improvement alternatives were determined for the proposed build year (2008) and design year (2028). The forecasted volumes were developed from current traffic volumes, WisDOT origin-destination surveys, historical WisDOT data, and consideration of existing and planned land use patterns. Exhibits 1 through 3 present current and forecasted Average Daily Traffic (ADT) for the No-Build and each of the improvement alternatives.

Level of Service (LOS) for roadway capacity was determined based on the Highway Capacity Manual procedures and from coordinated arterial system modeling for in-town alternatives. The roadway design criteria for STH 26 as a *Corridors 2020* connector route requires the roadway to be able to operate at LOS C or better in the design year of 2028.

Crashes along this portion of STH 26 were analyzed in Section I. Upgrading from a two-lane facility to a four-lane facility would improve traffic operations and safety throughout the project corridor.

The No-Build Alternative is not consistent with regional and statewide transportation goals. STH 26 is planned to function as a link in the statewide *Corridors 2020* connector network and as a safe, efficient

truck route. The low speeds, congestion, and conflicts with local traffic in the communities of Milton, Jefferson, and Watertown would severely limit the highway's function in the regional network.

South Segment

STH 26 between CTH Y just north of IH 90 at Janesville and STH 59-East at Milton was improved as a four-lane divided highway with at-grade access in 1999. Under all alternatives, the STH 26 traffic between CTH Y and Milton is expected to increase from 18,500 ADT to 33,000 ADT by the design year 2028. A high number of access points are located throughout this section of roadway. If no intersections in this segment are signalized, free flow traffic on STH 26 would operate at a forecasted LOS C in the design year. To provide reasonable and safe access as traffic volumes increase some public road intersections will need to be closed, grade separated or have interchanges built. Interruption of traffic flow on STH 26 due to signals would degrade the mobility along STH 26 to LOS D or lower. Private driveways may also need to be closed, combined or redirected to a local street system in order to enhance safety.

Alternative S3 was selected as the Preferred Alternative. The 3.9-mile (6.3-km) section of STH 26 from CTH Y north of Janesville to just south of STH 59 East in Milton was improved in 1999 from a two-lane rural roadway to a four-lane divided highway having expressway access standards. Additional lanes or capacity improvements for this section are not part of this project, but access modifications are planned for this section that will preserve the functionality of the highway and will permit the route to operate safely as traffic volumes increase. Access north of CTH Y would be managed and focused to future full access locations, one at or near McCormick Road and the other at Harmony Town Hall Road. Janesville, Milton, and Town of Harmony agree with these planned access locations.

An access location near McCormick Road is consistent with Janesville's plans. The city has expressed a preference for an at-grade signalized intersection at this location. Given the expectations of growth in residential and commercial uses in this area, WisDOT believes a full interchange will have greater safety and mobility benefits, and will be the best solution in the longer term for access to STH 26. A full interchange is included in this EIS as part of the Preferred Alternative as a long-term improvement and is shown on Exhibit 8. Access modification options have been presented at Public Information Meetings on November 5, 2003 and April 19, 2004. This decision will be reviewed at the time of design in cooperation with the city of Janesville to confirm that it is still the most appropriate solution, and a reevaluation of associated environmental consequences will be made if necessary.

Also long term, it is expected that the existing developed abutting properties south of McCormick Road will not have direct access to STH 26. A frontage road design has been included in this EIS for the north side of the highway in this area, recognizing that at the time of final design another approach may be more suitable depending upon the kind of changes that have occurred in the area. While construction in this area is not anticipated for several years, WisDOT will work with Janesville on early design in this area so as not to preclude desirable options for the future, and to allow area property owners to redevelop in accordance with a long-range plan. A reevaluation of associated environmental consequences will be made if needed.

Janesville, Milton, and Town of Harmony have developed an agreement among the three communities and passed individual resolutions (copies in Appendix B) supporting a full diamond interchange in the vicinity of Harmony Town Hall Road.

Also planned are a closure of the existing at-grade CTH Y intersection with only right-in and right-out traffic permitted; relocation of CTH Y to an interchange with STH 26 near McCormick Road; Woodcrest Drive will have only right-in and right-out access to STH 26; an interchange at Harmony Town Hall Road; and overpass structures at Wright Road, Town Line Road, and Henke Road. Individual driveway access will be focused at interchange or overpass locations. Free flow traffic on this section of STH 26 would operate at a forecasted LOS C or greater in the design year.

No-Build Alternative

Within the City of Milton, STH 26 operates as a two-lane facility with a 30-mph speed limit. Ten side roads and 54 driveways are located along STH 26, which results in reduced travel speeds, added crashes, and disruptions in traffic flow by turning movements from and onto the highway. Under the No-Build Alternative, traffic on STH 26 in Milton is expected to increase from 14,100 ADT to 25,000 ADT by the design year 2028. Travelers would be expected to experience LOS F during the design hour, which is beyond the capacity of the facility. During peak hours, drivers would experience long delays, dense traffic congestion, and severe deterioration of operations at intersecting streets and driveways. Pedestrians would experience difficulties crossing the roadway due to the lack of appropriate traffic gaps. Police, fire, and EMC services would be affected along or through the STH 26 corridor.

North of Milton to the Fort Atkinson Bypass, STH 26 is a two-lane rural highway. Under the No-Build Alternative, traffic would increase from the current 10,900 ADT to 19,500 ADT in the design year 2028 and would operate at LOS E. Turning movements onto or from the roadway would become increasingly difficult as traffic volumes increase. Passing opportunities within this rural segment would be minimal. Any minor traffic disruptions that occur would result in slow travel and/or delays.

Alternatives S2 and S3

Alternatives S2 and S3 include a bypass of the City of Milton beginning near Townline Road and joining the existing alignment near John Paul Road. Under both alternatives, an ADT of 9,500 by the design year 2028 is forecasted to use the bypass. This results in 15,500 ADT and 8,000 ADT south and north of STH 59-West, respectively, remaining on existing STH 26 in the City of Milton. Approximately 35 to 45 percent of the ADT would be removed from existing STH 26 in Milton. Both four-lane bypasses would operate at LOS A in the design year. Truck volumes on existing STH 26 within the City of Milton would be reduced by 80 to 90 percent.

In the rural section north of Milton to the Fort Atkinson Bypass, traffic volumes are projected to increase from the current 10,900 ADT to 19,500 ADT in the design year 2028. This four-lane rural segment would operate at LOS B in the design year.

Alternative S3 with the modifications since the DEIS was selected as the Preferred Alternative. Alternative S3 includes the modification of access for existing STH 26 between CTH Y and Town Line Road as discussed above, and a bypass of the City of Milton beginning near Townline Road and joining the existing alignment near CTH N. Alternative S3 continues on to the south Fort Atkinson interchange. The four-lane bypass would operate at a LOS A in the design year.

Central Segment

No-Build Alternative

Along the Fort Atkinson Bypass, traffic volumes on STH 26 are projected to increase from 7,000 ADT to 14,000 ADT in the design year 2028. Under the No-Build Alternative, this two-lane facility would operate at LOS E in the design year. From the Fort Atkinson Bypass to the City of Jefferson, traffic volumes are projected to increase from the current 11,200 ADT to 21,000 ADT in the design year 2028 with operation at LOS E.

Within the City of Jefferson, STH 26 is currently mostly a two-lane facility with a 30-mph speed limit. Thirty-one side roads and 63 driveways intersect STH 26, which results in reduced travel speeds, and disruptions in traffic flow by turning movements from and onto the highway. Under the No-Build Alternative traffic in Jefferson is expected to increase from 21,300 ADT to 38,000 ADT in south Jefferson; 16,600 ADT to 31,000 ADT south of USH 18; and 15,000 ADT to 28,000 ADT north of USH 18 by the design year 2028. Travelers are forecasted to experience LOS E and F during certain hours of the day. During peak hours, drivers would experience long delays, dense traffic congestion, and severe deterioration of operations at intersecting streets. Pedestrians would experience difficulties crossing the roadway due to the lack of appropriate traffic gaps.

North of Jefferson to Johnson Creek, traffic volumes are forecasted to increase from 10,900 ADT to 21,000 ADT with operation at LOS E in the design year. Turning movements onto or from the roadway would become increasingly difficult as traffic volumes increase on this two-lane section of roadway. Passing opportunities within this rural segment would be minimal.

Alternatives C1, C2, C2(a), C2(b), C3, and C4

All Central Segment alternatives consist of a 4-lane divided rural highway, including the existing Fort Atkinson Bypass, which adds a second roadway to the existing 2-lane bypass highway within the existing right-of-way. Traffic volumes in this section are forecasted to increase from 7,000 ADT to 14,000 ADT in the design year 2028. By adding the second roadway and separating the opposing traffic, the four-lane roadway would operate at Level of Service (LOS) A.

Alternatives C1, C2, C2(a), and C2(b) are west bypasses of the City of Jefferson. Alternatives C3 and C4 are near east and east bypasses, respectively. Between Fort Atkinson and Jefferson, Alternative C1 would be on relocation west of the Union Pacific Railroad with existing STH 26 remaining as a local road connecting the two cities. Alternative C1 would provide substantial transportation benefits by separating the through traffic on STH 26 from the local traffic traveling between Fort Atkinson and Jefferson. Safety would improve for all traffic and the traffic flow on STH 26 would be much smoother without the conflicts from local traffic entering and exiting the traffic stream in the short distance between the two cities.

Alternatives C2, C2(a), C2(b), C3, and C4 are proposed to remain on existing STH 26 between Fort Atkinson and Jefferson. Since STH 26 would not have any at-grade access between interchanges in this section, local traffic would be required to use either CTH K or a new road for access. CTH K does not have the capacity to safely carry substantially increased traffic volumes at highway speeds. Alternatives C2, C2(a), and C2(b) have the option of following the Alternative C1 alignment through this area, which would leave existing STH 26 for local traffic.

Traffic volumes west of Jefferson along Alternatives C1, C2, C2(a), and C2(b) are forecasted to be 14,000 ADT south of USH 18 and 12,500 north of USH 18 in the design year 2028. Traffic volumes east of Jefferson along Alternative C3 are forecasted to be 12,500 south of USH 18 and 11,500 north of USH 18. Traffic volumes along Alternative C4 are forecasted to be 12,000 south of USH 18 and 10,500 north of USH 18. Alternative C3 is projected to have slightly higher volumes than the other east side bypass alternative because the east and north interchanges on Alternative C3 are located closer to the city. All bypasses east and west of Jefferson would operate at LOS A. The bypasses are forecasted to reduce existing STH 26 traffic volume in the City of Jefferson by 35 to 50 percent and reduce truck volume by 40 to 50 percent.

Alternatives C1, C2, C2(a), C2(b), and C3 provide good access to the City of Jefferson and particularly the Jefferson industrial area in the northwest part of the City via an interchange in the vicinity of existing STH 26 and Junction Road. There is a concern that Alternative C3 would encourage trucks to enter the City from the east. Providing an adequate turning roadway for large trucks turning from westbound USH 18 to northbound STH 26 would require removal of a National Register historic building in the downtown historic district.

Alternative C4 has both transportation advantages and disadvantages. Its advantage is it totally bypasses the section of STH 26 between Jefferson and Johnson Creek. This section of existing STH 26 has several side roads and driveway intersections serving substantial residential development. Closure or consolidation of these access points would have to be considered under Alternatives C1, C2, C2(a), C2(b), and C3. Even with this access control and depending on land development patterns, the side road and STH 26 traffic volumes between Jefferson and Johnson Creek could grow to the point where access to STH 26 would be difficult and the STH 26 level-of-service would be reduced.

A disadvantage for Alternative C4 is the location of the interchanges. The Alternative C4 bypass interchange for USH 18 is east of St. Coletta. All traffic headed for Jefferson would have to travel on the section of USH 18 that traverses the St. Coletta property and is in a deep cut on a steep grade. This route is highly undesirable for both traffic and for St. Coletta residents for safety and efficiency reasons. The Alternative C4 north Jefferson interchange is located on Junction Road near CTH Y. This location does not serve the desired traffic flow from the north and northwest sides of Jefferson and from the Jefferson north side industrial area as well as the other three bypass alternatives.

A second disadvantage for Alternative C4 is the connection to existing STH 26 at the south edge of Johnson Creek. Traffic on Old STH 26 would be required to follow an indirect route via CTH Y, South Street, and CTH B in Johnson Creek to reach STH 26. This would substantially increase the driving time for the estimated 10,000 drivers each day on Old STH 26 and would create a major signalized intersection on STH 26 at CTH B with an associated decrease in level-of-service.

The west side bypass alternatives provide two transportation benefits that the east side alternatives do not provide. Traffic flow, and particularly truck traffic, within the Central Segment is generally more oriented to USH 18 to the west to Madison and STH 89 to Lake Mills than it is to USH 18 to the east towards Helenville. Travelers going to the Milwaukee area typically follow STH 26 north to IH 94 to go east. The west bypass alternatives facilitate this desired westerly traffic flow and allow STH 89 to be moved from its current location on a substandard old county highway route to the bypass route.

The existing and planned land use on the west side of Jefferson has a large commercial and institutional component. A growing commercial area is located along USH 18 east of the Crawfish River. Three schools, high, middle, and elementary schools are also located just east of the Crawfish River. The

Jefferson Performing Arts Center, with regularly scheduled high quality performances, is located at the high school. The County Fair Grounds, with over 150 scheduled events throughout the year, some having attendance upwards of 40-50,000 visitors per day, is located on the northwest side of the City. The Jefferson Speedway is located a few miles west of the City. These land uses generate substantial daily and special event traffic and truck volumes from outside the City of Jefferson. Many of the drivers would be unfamiliar with the area. The west side bypasses would provide an efficient and safe route for drivers to reach these destinations without the delay and safety issues of traveling through the entire City.

North of Jefferson to Johnson Creek, Alternatives C1, C2, C2(a), C2(b), and C3 would follow existing STH 26 as a four-lane expressway to the Village of Johnson Creek. Traffic volumes along this section of roadway would increase from 10,900 ADT to 21,000 ADT in the design year 2028. This section of roadway would operate at LOS B, assuming additional development along STH 26 is minimal as planned in the Jefferson County Land Use Plan.

STH 26 was improved under a separate construction project in 2001-2002 from the south limits of Johnson Creek to the end of the Central Segment (Baneck Lane). All alternatives follow the improved STH 26 in this section. This section of STH 26 was improved to a four-lane divided highway with controlled access to limit the number of side road intersections and improve capacity and safety. Traffic volumes within this section are forecasted to be in the range of 27,500 to 39,500 ADT in the design year 2028. Proper signalized intersection spacing and signal coordination/timing could provide progressive traffic flow along STH 26.

No capacity improvements are currently proposed for this section of roadway under all alternatives. Some public road access may need to be grade separated, interchanged with STH 26, or modified to allow for safer and smoother travel. Since publication of the DEIS, all alternatives have been modified to include a structure crossing of I-94 about 1,200 feet (366 m) east of existing STH 26. The bridge would connect Waldmann Lane with Spring Lane, and completes a local roadway system that allows local traffic to have mobility between the north and south sides of I-94 without having to use the STH 26/I-94 interchange. The continuity of the local road system will relieve traffic through the interchange area and will preserve the long-term functionality of the STH 26 corridor. This modification was presented at the Public Hearings for this project. Further study of access management with local units of government is planned. The results of this inter-governmental study will guide development of the proposed STH 26 alternatives in Johnson Creek.

Alternative C2(a) was selected as the Preferred Alternative. The Preferred Alternative includes the option of following the Alternative C1 alignment through the area between Fort Atkinson and Jefferson, which would leave existing STH 26 for local traffic. The four-lane roadway would operate at LOS A.

North Segment

No-Build Alternative

From Baneck Lane to the City of Watertown, traffic volumes along STH 26 are forecasted to increase from 10,400 ADT to 20,000 ADT in the design year 2028. This section of roadway would operate at LOS E in the design year. Turning movements onto or from the roadway would become increasingly difficult as traffic volumes increase on this two-lane section of roadway. Passing opportunities within this rural segment would be minimal.

Within the City of Watertown, STH 26 was improved in 2003 to a four-lane highway south of STH 19 (Main Street), but will remain as a two-lane highway north of STH 19. Twenty-six side roads and 109 driveways intersect STH 26, which result in reduced travel speeds and disruptions in traffic flow by turning movements from and onto the highway. Under the No-Build Alternative, traffic volumes south of STH 19 are forecasted to increase from 20,500 ADT to 37,000 ADT, and from 14,500 ADT to 26,000 north of STH 19 in the design year 2028. This important highway connection with STH 19 would operate at LOS F in the design year. STH 26 north and south of STH 19 would operate at LOS D or worse. During peak hours, drivers would experience long delays, dense traffic congestion, and severe deterioration of operations at intersecting streets. Pedestrians would experience difficulties crossing the roadway due to the lack of appropriate traffic gaps.

North of Watertown, traffic volumes are forecasted to increase from 8,700 ADT to 15,500 ADT with operation at LOS E in the design year. Turning movements onto or from the roadway would become increasingly difficult as traffic volumes increase on this two-lane section of roadway. Passing opportunities within this rural segment would also decrease.

Alternative N1 and N2

Alternatives N1 and N2 would follow STH 26 from Baneck Lane to the City of Watertown as a four-lane expressway. Traffic volumes on this section of roadway are forecasted to increase from 10,400 ADT to 20,000 ADT in the design year 2028 with operation at LOS B.

Alternatives N1 and N2 are west and east bypasses of the City of Watertown, respectively. Traffic volumes along Alternative N1 west of Watertown are forecasted to be 11,500 ADT south of STH 19 and 12,500 ADT north of STH 19 in the design year 2028. Traffic volumes along Alternative N2 east of Watertown are forecasted to be 9,000 ADT south of STH 16 and 22,000 ADT north of STH 16. Both west and east bypasses would operate at LOS A in the design year. Alternative N1 is estimated to reduce traffic on existing STH 26 in Watertown by 30 to 45 percent compared to Alternative N2 reducing this volume by 20 to 35 percent. Truck volumes on existing STH 26 in Watertown would be reduced by 45 to 50 percent under Alternative N1 and 40 to 45 percent under Alternative N2.

Alternative N1 provides a substantial transportation benefit by connecting STH 26 and the existing STH 16 bypass north of Watertown. STH 19 follows Main Street through the heart of the downtown commercial area of the City. Alternative N1 provides motorists traveling on STH 19 with the opportunity to bypass the City of Watertown to the north, further reducing traffic and truck volumes along both STH 19 and existing STH 26 in Watertown. The City of Watertown has an existing large industrial area and planned commercial development on the west side of the City. The west side bypass Alternative N1 would best serve traffic from this development.

North of Watertown, both build alternatives would follow existing STH 26 as a four-lane rural expressway. Traffic volumes along this section of roadway are forecasted to increase from 8,700 ADT to 15,500 ADT in the design year 2028. This section of roadway would operate at LOS B.

Alternative N1 was selected as the Preferred Alternative. The four-lane roadway would follow existing STH 26 from Johnson Creek to the City of Watertown and operate at a LOS B. Alternative N1 includes a west four-lane bypass of the City of Watertown that would operate at a LOS A. The four-lane roadway would follow existing STH 26 north of Watertown and operate at a LOS B.

4.1.4.2 Airports

According to Section 114.134(2), Wisconsin Statutes: "No person shall operate an airport within this state unless all runways and landing strips are so located that approaching and departing aircraft clear all public roads, highways, railroads, waterways or other traverse ways by a height which complies with applicable federal standards." Also, the Wisconsin Department of Transportation, Bureau of Aeronautics, is to be notified when a proposed highway project that would change the horizontal or vertical alignment of a highway is within four miles of a public use or military airport.

The Fort Atkinson Municipal Airport (Exhibit 6, Sheets 3A and 3B) and the Watertown Municipal Airport (Exhibit 7, Sheets 2 and 4) are located within four miles of the proposed STH 26 improvements. Coordination with the Bureau of Aeronautics was received on April 7, 1999, during the project scoping, and on June 13, 2000, after the detailed study alternatives were selected (Appendix A). All of the runways at Fort Atkinson and Watertown are either visual or non-precision approach runways. None yet fall into the precision approach category and it is unlikely any of them will within the next five years.

The detailed study alternatives were analyzed in accordance with the Federal Aviation Regulations (FAR) for obstacles near airports and how close an object may be before becoming an obstruction. The FAR states the following airspace limits:

- Primary Surface – The FAR states that nothing should be parked within 250 feet either side of the runway centerline, and 200 feet past each end of the runway. All detailed study alternatives, including the selected Preferred Alternative, are outside these limits.

- End of Visual Approach Runway – The FAR states that with visual approaches only, nothing should go higher than a 20:1 slope from a distance of 200 feet from the approach ends of the runways. All detailed study alternatives, including the selected Preferred Alternative, are within the acceptable regulations, even taking into account truck and sign bridge heights.

- End of Non-precision Instrument Approach Runway – The FAR states that with non-precision instrument approaches, nothing should go higher than a 34:1 slope from a distance of 200 feet from the approach ends of the runways. All detailed study alternatives, including the selected Preferred Alternative, are within the acceptable regulations, even taking into account truck and sign bridge heights.

- End of Precision Instrument Approach Runway – The FAR states that with precision instrument approaches, nothing should go higher than a 40:1 slope from a distance of 200 feet from the approach ends of the runways. All detailed study alternatives, including the selected Preferred Alternative, are within the acceptable regulations, even taking into account truck and sign bridge heights.

- Alongside the Runway – The FAR states that starting from the runway centerline, nothing should be built for 125 feet since this is a visual, utility runway. After 125 feet, a slope of 7:1 is allowed until reaching 150 feet above the runway elevation for a distance of 5000 feet from the runway. All detailed study alternatives, including the selected Preferred Alternative, are within the acceptable regulations, even taking into account truck and sign bridge heights.

The Bureau of Aeronautics in a letter dated April 7, 1999, (Appendix A) expressed concern over construction equipment, particularly tall cranes, that may need special consideration during construction. Prior to construction, further coordination with the Bureau of Aeronautics will take place.

4.1.4.3 Community Access

Community access refers to the impacts of the proposed improvements on highway access to the communities within the study area. In general, alternatives that do not provide sufficient interchanges or at-grade intersections can adversely impact community access. Community access can also be impacted if the interchanges or at-grade intersections are located so far from the communities that they do not serve the local residents and businesses. Maintaining efficient access is an important criterion in evaluating alternative highway alignment impacts.

Internal circulation and access to different neighborhoods or districts within a community can also be impacted by congestion on existing corridors. In the case of STH 26, the existing highway corridors through the eastern part of Milton, and the central portions of Jefferson, and Watertown are congested with through-traffic, particularly truck traffic. In the case of each of these communities, the No-Build Alternative furthers congestion and forms a barrier to efficient cross-town traffic circulation.

South Segment

Current north-south access routes into the City of Milton are Janesville Street (STH 26) and John Paul Road (CTH Y). Milton is unique for a City its size in that it has two business districts, resulting from the consolidation of two smaller communities, Milton and Milton Junction. The larger of the two districts is the east side business district, which is accessed via Janesville Street (STH 26). The smaller district is the west side business district along John Paul Road.

With the No-Build Alternative, access to the City of Milton would remain the same. The No-Build Alternative would not relieve congestion and truck traffic on Janesville Street. The STH 26 corridor would continue to form a barrier to efficient cross-town traffic circulation.

Alternatives S2 and S3 would shift STH 26 through-traffic to a bypass around the east side of the City. Access to the community would be provided by an interchange at STH 59 approximately 3,500 feet (1,070 meters) east of the existing STH 26 corridor. Under both Alternatives S2 and S3 there would be a north side interchange. A north interchange under Alternative S2 would be at Bowers Lake Road, and a north interchange under Alternative S3 would be near John Paul Road and Klug Roads. Alternatives S2 and S3 both include an interchange at CTH N. This interchange would provide safe and efficient access for the often heavy volumes of traffic traveling east-west on CTH N and turning south onto STH 26 and into or through the City of Milton.

With the proposed Alternative S2 or S3 improvements, the primary community access from the south would be shifted to the new interchange at STH 59 east of the downtown. East High Street, rather than South Janesville Street, would become the major entrance arterial. This interchange would provide good access to the planned business park on the southeast side of the City.

In a letter dated March 13, 2000, the Rock County Members of the STH 26 Task Force, Milton Town Board and Task Force, and Harmony Town Board and Task Force requested that the Milton bypass include a “trumpet” or “half-diamond” interchange on the south side of Milton near Town Line Road (see Appendix A). The letter indicates that there are 24 businesses located on the City’s southeast side,

primarily on South Janesville Street, and that access to the south side of Milton is essential to the community. In a letter/resolution dated June 21, 2000 (see Appendix A), the City of Milton requested an interchange or signalized controlled intersection be created at or immediately south of the area in which Townline Road intersects STH 26 (no further south on STH 26 than Bingham Road) to allow a free flow of traffic in a northerly and southerly direction to and from the southern boundary area of the City of Milton and also allows direct access into STH 26 from Townline Road.

With Alternative S2, the primary entrance into the City of Milton from the north would be via an interchange at Bowers Lake Road. This would provide good access to both existing and planned developments on the north side of the City, including Milton High School and Middle School.

With Alternative S3, the primary northern access to the community would be from a new interchange near the existing intersection of John Paul Road and existing STH 26. The north interchange is located 1.5 miles (2.4 kilometers) north of the City. This interchange location would provide good access to both the west side business district via John Paul Road and the east side downtown via the existing STH 26 corridor (North Janesville Street).

Between Milton and Fort Atkinson there would be an interchange at CTH N and there would be at-grade intersections at County Line Road, Hamer Lane, and Vickerman Road. Grade separation structures are proposed at Pond Road and Old Highway 26 immediately south of the Fort Atkinson bypass.

Alternative S3 with the modifications since the DEIS was selected as the Preferred Alternative. There are no additional lanes or capacity improvements planned for the existing expressway access section of STH 26 between CTH Y north of Janesville to Town Line Road south of Milton. Access modifications are planned that will preserve the functionality of the highway and will permit the route to operate safely as traffic volumes increase. Several access modifications are planned. The full access at-grade intersection connection of CTH Y with STH 26 near Interstate 90 will be closed for safety concerns, and only right-in and right-out traffic will be allowed at this location. CTH Y will be relocated to a new interchange connection with STH 26 near McCormick Road. Relocated CTH Y will remain as a north-south access route between the cities of Janesville and Milton. The existing intersection of McCormick Road will be closed at STH 26 with community access redirected to the new CTH Y interchange. Right-in and right-out only access will be permitted at Woodcrest Drive and Bingham Road, with additional community access redirected to new interchanges at McCormick Road or Harmony Town Hall Road.

An extension of Harmony Town Hall Road one-half mile north to Town Line Road, including a new diamond interchange at STH 26 is planned. The full diamond interchange will also be a southern community access point for the City of Milton, facilitating traffic along STH 26 between Janesville and Milton. An extension of Henke Road from Town Line Road northerly to existing STH 26 and St. Mary's Road (STH 59) is planned for local southern access into the City of Milton. The existing at-grade connection of Town Line Road with STH 26 will be closed for access control purposes, and an overpass bridge at STH 26 connecting the east and west segments of Town Line Road will be constructed. These planned improvements will facilitate local mobility from one side of STH 26 to the other, and will become southern access routes into the City of Milton.

Access to and from STH 26 from local roads will be redirected to new full diamond interchanges on STH 26 at or near McCormick Road, Harmony Town Hall Road, or STH 59.

The Preferred Alternative (S3) shifts STH 26 through-traffic currently in the City of Milton to a bypass around the east side of the city. The primary access to the community from the south would be shifted to

either a new full diamond interchange at the Harmony Town Hall Road extension or to a new full diamond interchange at STH 59 east of the downtown. The diamond interchange at STH 59 would provide good access to Milton's industrial park on the southeast side of the city.

An interchange originally planned for Klug Road north of Milton as part of the detailed study S3 alternative was eliminated as part of the Preferred Alternative due to insufficient traffic volumes. A new frontage road connecting Klug Road with Bower's Lake Road in Milton is planned for local access.

A new full diamond interchange is planned at CTH N and would be the primary northern access to the community. CTH N also functions at a direct east west route to Interstate 90 to the west, and the City of Whitewater and the University of Wisconsin Whitewater campus to the east. The CTH N interchange provides good access to both the west side business district of Milton via John Paul Road and the east side downtown area of Milton via the existing STH 26 corridor (North Janesville Street).

Between CTH N and Fort Atkinson there would be at-grade intersections at County Line Road, Hamer Lane, and Vickerman Road. Grade separation structures are planned at Pond Road and Old Highway 26 immediately south of the Fort Atkinson bypass. Jug-handle intersections are planned for Pond Road to provide community access to the area.

Central Segment

The No-Build Alternative would retain Main Street (STH 26) in the City of Jefferson as the primary arterial carrying both local and through-traffic, including heavy truck traffic. Access would be direct, but congestion on the existing road would make cross-town circulation increasingly difficult. Overall traffic movement both through and within the City would continue to be a problem with the No-Build Alternative.

Northwest of Fort Atkinson the at-grade intersections of Hoard Road and Banker Road would be converted to grade separation structures. This may alter some travel patterns on the northwest side of Fort Atkinson, but will not affect access to businesses or institutions in the community.

Current access into the City of Jefferson from both the north and the south is via Main Street (STH 26). With all of the proposed build alternatives there would be a south interchange connecting with the existing STH 26 corridor (South Main Street). All of the build alternatives also have interchanges with USH 18 (Racine Street) and a north interchange with the existing STH 26 corridor. Access to existing businesses on North and South Main Street would be via the north and south interchanges. Main Street would continue to function as Business Highway 26.

The interchanges at USH 18 (West Racine Street) for the west side bypasses, Alternatives C1, C2, C2(a), and C2(b) would provide good access to the west side school campuses, the Jefferson County Fairgrounds and to the west side residential neighborhoods. The west bypasses would reconnect with the existing STH 26 corridor near Jahn Lane.

Alternative C3 would provide good access to the east side neighborhoods. There would be grade separation structures at CTH K, CTH N, and Vogel Lane. North of the USH 18 interchange there would be grade separation structures over Dewey Road and the Union Pacific Railroad. Alternative C3 would rejoin the existing STH 26 corridor near Jahn Lane.

Compared to the other three build alternatives, Alternative C4 would not provide the same level of community access. The interchange at USH 18 would be approximately 1.8 miles (2.9 kilometers) northeast of downtown Jefferson and outside the City's long-range urban service area. There would be an interchange at Junction Road. Alternative C4 would reconnect to the existing STH 26 corridor near the Village of Johnson Creek where it would join the planned four-lane improvements.

All of the Central Segment build alternatives consider grade separating CTH Y at Johnson Creek, and redirecting community access to the at-grade CTH B signalized intersection.

Alternative C2(a) was selected as the Preferred Alternative. Three interchanges will provide access to and from the City of Jefferson. These interchanges are located south and north of the city connecting with the existing STH 26 corridor (Main Street), and west of the city on USH 18. The Preferred Alternative C2(a) incorporates the C1 alignment between Fort Atkinson and Jefferson, thereby leaving the existing STH 26 roadway between these two communities in place for additional local mobility.

Eight grade separations and two at-grade intersections will be provided to maintain local circulation and access. Grade separations will be at Banker Road, Hoard Road, CTH W, CTH J, Popp Road, CTH N, Jahn Road, and Spring/Waldmann Lanes. At-grade intersections will be at Biederman Road and Jefferson Road.

North Segment

Current north-south access into the City of Watertown is via Church Street (STH 26). With the No-Build Alternative, through-traffic on STH 26 would continue to be routed on Church Street through the City of Watertown. Traffic conditions and levels of service would ultimately decline on this corridor and the heavy north-south traffic flow would impede cross-town circulation.

Both Alternatives N1 and N2 include interchanges on the south and north sides that would connect to Church Street. Church Street would continue to function as Business Highway 26. The south interchanges for both Alternatives N1 and N2 would be located near Turf Drive. Church Street would continue to provide the most direct route to downtown Watertown.

Alternative N1, the west side bypass, includes grade-separation structures at CTH Y, CTH A, Horseshoe Road, and CTH T (West Street). There is an interchange at STH 19. North of STH 19, Alternative N1 would cross over the Canadian Pacific Railroad tracks and Welsh Road. There is a cloverleaf interchange providing direct free-flow connections between STH 26 and STH 16. This alternative provides a convenient bypass for STH 19 traffic wanting to avoid downtown Watertown. Alternative N1 reconnects to existing STH 26 south of CTH Q.

Provimi Road will be realigned to connect with the existing STH 26 corridor. The City plans to extend a new west side connector from Provimi Road south to CTH A to provide a west side arterial for local traffic.

The west side bypass would provide good access to the west side business and industrial parks and planned residential expansion areas.

Alternative N2, the east bypass, would provide good access to the businesses on the south side of the City via the south interchange. The east interchange of Alternative N2 provides an efficient connection to STH 16-East, but would fail to improve access to the City's primary growth areas on the west side of the

City. The section of Alternative N2 that utilizes the STH 16 corridor would provide enhanced community access to the northeast side of the City via half-diamond interchanges at Oak Hill Road and at CTH R (Fourth Street). Alternative N2 rejoins the existing STH 26 corridor at the existing STH 16 interchange. Under Alternative N2, STH 19 traffic including trucks would continue to use the existing route through the Watertown downtown commercial district in order to gain access to STH 16.

Alternative N1 was selected as the Preferred Alternative. Three interchange locations will provide access to and from the City of Watertown. These interchanges are located south and north of the city connecting with the existing STH 26 corridor (Church Street), and west of the city on STH 19. The interchange north of the city is a dual interchange, with one interchange (diamond) connecting to Church Street for local community access, and the other interchange (free-flow) for the connection of STHs 16, 19 and 26. A fourth interchange is located about eight miles north of the City of Watertown and connects the western and eastern legs of STH 60.

Seven grade separations and eleven at-grade intersections will be provided to maintain local circulation and access. Grade separations will be at High Road, CTH Y, CTH A, CTH T, Silver Creek Road along STH 26, and Water Street and Second Street along STH 16. At-grade intersections will be at Spruce Drive, Emerald Drive, Zilage Lane, and Ebenezer Drive south of Watertown, and Kiln Road, CTH Q, Second Street, CTH JM, Clyman Road, Wilson Road, and CTH CJ north of Watertown.

A new local road connecting Horseshoe Road to CTH A and CTH Y is being made to improve local circulation.

4.1.5 Economic Impact on Existing Businesses

This section describes likely impacts to the economic viability of existing businesses in the STH 26 study area.

The different types of existing businesses in the study area include downtown commercial businesses such as locally-owned restaurants and retail shops; highway-oriented commercial businesses such as fast-food restaurants, gas stations and "big-box" retail stores; agribusinesses such as food processing and farm equipment sales and service businesses; and, manufacturing businesses, such as lumber yards, industrial equipment sales and service and woodworking businesses.

Downtown commercial businesses in the study area are located in the Cities of Milton, Fort Atkinson, Jefferson and Watertown, and the Village of Johnson Creek. There are highway-oriented business districts along the existing STH 26 approaches into each of the communities.

According to the WisDOT study, The Economic Impacts of Highway Bypasses on Communities (WisDOT 1998), bypasses generally result in positive impacts for medium to large communities (population over 1,000). All three potential bypass communities in the STH 26 study area have populations that exceed 1,000 people. Key WisDOT bypass study findings include:

- In most communities, highway bypasses have little adverse impact on overall economic activity; the economies of smaller communities have a greater potential to be adversely impacted by a bypass.

- Over the long term, average traffic levels on the "old routes" in medium and large bypassed communities are close to or higher than pre-bypass counts, indicating continued strong economic activity in those communities and the opportunity for retail trade to flourish.

- Little retail flight has occurred in bypassed communities, meaning that few businesses have relocated or developed new operations in areas adjacent to the bypass route.

- Communities view their bypasses as beneficial overall; yet, communities and individual businesses understand that the bypasses presented changes that must be addressed proactively.

The City of Fort Atkinson has experienced similar effects from a bypass as mentioned above. This community located within the project corridor was bypassed with STH 26 in 1995. According to city officials and business groups, many local residents and business owners feared potential negative effects prior to construction of the bypass. Once the bypass was opened, the City of Fort Atkinson experienced positive effects including a reduction of traffic, particularly trucks; safer vehicle and pedestrian circulation; increased accessibility to the downtown; and a revitalization of the downtown. Only one business closed after the bypass was opened and it is unknown whether it was related to the STH 26 bypass.

Section 1.3.2 Existing and Future Traffic Volumes shows that with almost all of the bypass alternatives, traffic on existing STH 26 is forecasted to return to, or surpass pre-bypass levels. This indicates that the economic activity of existing businesses is likely to continue and even increase in the City of Milton, City of Jefferson, and the City of Watertown.

In spite of the overall positive influence of bypasses in communities over 1,000 population, there will be some individual businesses that will be adversely impacted by loss of through-traffic. Existing highway-oriented businesses that are near interchanges can attract regional traffic exiting the highway for gasoline and food. Ultimately, there may also be some business loss to individual businesses due to competition from new businesses located at superior locations. This business loss could be lessened by attractive destinations such as downtowns that could motivate detours from the highway.

In some rural areas there are scattered businesses with direct driveway access to the existing STH 26 corridor. In some instances, these businesses could be impacted by access restrictions.

Under the No-Build Alternative, some businesses would experience a loss of business as high traffic volumes hinder the access to and from these businesses.

4.1.5.1 South Segment

Most of the potentially impacted businesses in the South Segment are located on the existing STH 26 corridor between CTH Y north of Janesville to STH 59 on the southeast side of the City of Milton. Modification of the existing highway access between Janesville and Milton will result in the loss of direct access to STH 26 for businesses along this segment. Indirect access will be provided to these businesses at interchange locations either near McCormick Road or Harmony Town Hall Road and use of a frontage or local road system. Businesses that cannot be served in this manner may require relocation.

Both Alternatives S2 and S3 would require two business relocations.

The types of businesses likely to be adversely impacted include service stations, convenience stores, and similar types of businesses that serve through-traffic. Most of the businesses that serve local clientele are unlikely to be adversely impacted and could be positively impacted by reduced congestion and better cross-town circulation.

With both Alternatives S2 and S3, average daily traffic on existing STH 26 through the City of Milton is forecasted to drop with the opening of the bypass corridors and then return close to pre-bypass levels over the first 20 years of operation.

Alternative S3 was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. Also included as part of the Preferred Alternative is the modification of access for the existing section of STH 26 between Janesville and Milton. As a result of these changes, this alternative will now result in the relocation of 4 businesses.

4.1.5.2 Central Segment

Most of the potentially impacted businesses in the Central Segment are located on South Main Street in the City of Jefferson. The businesses that may be adversely impacted by a Jefferson bypass are those that serve through-traffic, such as service stations, fast-food restaurants, and motels. The majority of businesses that serve primarily local customers are likely to benefit from reduced congestion. In particular, the downtown businesses are likely to benefit from the reduction of through truck-traffic, reduced congestion, and improved pedestrian circulation.

Alternative C1 would result in two business relocations; Alternative C2 would lead to three business relocations; Alternative C2(a) would result in 4 business relocations; Alternative C2(b) would result in 5 business relocations; Alternative C3 would lead to one business relocation; and, Alternative C4 would not result in any business relocations.

Traffic forecasts for all of the Build Alternatives in the Central segment indicate that traffic on Main Street would drop with the opening of the bypass corridors and then climb to levels that exceed pre-bypass conditions during the first twenty years of operation.

Alternative C2(a) was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. As a result of these changes, this alternative will now result in the relocation of 2 businesses.

4.1.5.3 North Segment

Most of the potentially impacted businesses in the north segment are located on South Church Street in the City of Watertown. The businesses that may be adversely impacted by a Watertown bypass are those that serve through traffic such as service stations, fast food restaurants, and motels. The majority of businesses that serve primarily local customers are likely to benefit from reduced congestion. In particular, the downtown businesses on Main Street are likely to benefit from better cross-town traffic circulation.

Alternative N1 would connect STH 19 with STH 16. This connection would reduce the truck traffic through the downtown area (existing STH 19 route).

Alternative N1 would result in 7 business relocations and Alternative N2 would result in 6 business relocations (Table 4.1.8).

Traffic forecasts for both North Segment build alternatives indicate that average daily traffic on the existing STH 26 corridor would drop after the opening of the bypass corridors and then gradually surpass pre-bypass conditions during the first 20 years of operation.

Alternative N1 was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. In particular, the size and layout of the north interchange for the City of Watertown was modified. As a result of these changes, this alternative will now result in the relocation of 1 business.

4.1.6 Servicing of Industrial Sites

One of the key objectives shared by nearly all of the local planning in the STH 26 study area is the goal of enhanced economic development and providing adequate transportation infrastructure to link business and industrial sites in the area to the regional highway system. Most of the communities in the region have developed planned industrial or business parks. New industries and businesses, as well as expansions of existing businesses are encouraged to locate in these planned park settings.

Another important aspect of economic development planning in the region is maintaining efficient transportation routes from the various business and industrial parks to the Interstate Highway system. Currently designated truck routes on STH 26 go through the eastern portion of Milton, and the central portions of Jefferson and Watertown. Improving route efficiencies and decreasing travel times between communities on STH 26 and the Interstate Highway system is a clear benefit derived from highway improvement.

All of the alternative STH 26 routes have been designed to provide good access to both existing and planned industrial and business parks in Ft. Atkinson, Jefferson, and Johnson Creek. Highway improvements will provide more efficient intercity movement. These improvements will help to facilitate the movement of industrial materials and products, enhancing the economic viability of the region's industrial and business sectors.

Communities in the STH 26 study area favor alternatives that provide direct access to industrial sites and provide alternative truck routes that would reduce through-town truck traffic. Industries are seeking improvements that would provide the most direct and least congested access to the regional highways and the Interstate system. Some alternatives directly impact industrial sites by using land intended for industrial development.

4.1.6.1 South Segment

The No-Build Alternative would retain the existing truck routes on Janesville Road and John Paul Road. Industrial traffic from the Southeast Industrial Park would continue to be routed through the central portion of the community.

Both Alternatives S2 and S3, which bypass around the southeast side of Milton would provide equally good access to the planned industrial and business park expansion area on the City's southeast side, avoiding congestion on the existing STH 26 through Milton. This traffic could avoid congestion on the existing STH 26 through the east side business district and neighborhoods.

Existing industries located on the west side of the City would continue to access Interstate Highway 90 via either John Paul Road and the existing STH 26 interchange or via STH 59. Access to Interstate 94

would be via John Paul Road to STH 26 north of the City. Travel times to Interstate Highway 94 would be reduced because of the bypasses around Fort Atkinson and Jefferson and the four-lane highway improvements through the Village of Johnson Creek.

Alternative S3 was selected as the Preferred Alternative. The 3.9-mile (6.3-km) section of STH 26 from CTH Y north of Janesville to just south of STH 59 East in Milton was improved in 1999 from a two-lane rural roadway to a four-lane divided highway having expressway access standards. Additional lanes or capacity improvements for this section are not part of this project, but access modifications are planned for this section that will preserve the functionality of the highway and will permit the route to operate safely and efficiently at an adequate LOS and traffic speed as traffic volumes increase. The Preferred Alternative S3 includes an east bypass of Milton with an interchange planned at new STH 59, which is centrally located within Milton's industrial park. The Preferred Alternative provides a four-lane highway that maintains adequate traffic speeds and LOS, and provides good access to Interstates 90 and 94. These factors will enhance the viability of industrial parks along the STH 26 corridor route.

4.1.6.2 Central Segment

The No-Build Alternative would fail to address the problem of routing traffic through the central part of the City. Congestion on Main Street through the downtown area currently impacts industry in the area. Continuing routing the industrial traffic through the central part of the City would ultimately impact the City's ability to retain existing business and attract new business to the area.

Most of the planned general and light industrial expansion in the City of Jefferson will be occurring in the industrial parks planned for the northeast side of the City. Junction Road will be the primary internal arterial serving the industrial district. All of the proposed Build Alternatives would provide enhanced access to the planned general and light industrial parks on the northeast side of the City. Alternatives C1, C2, C2(a), C2(b), and C3 all have planned interchanges near Jahn Lane on the north side. Alternative C4 has an interchange at Junction Road.

Existing industries on the south side of the City would most likely access the alternative bypass routes at the south interchange. The travel times to Interstate Highway 90 would be roughly equivalent for each build alternative.

Alternative C2(a) was selected as the Preferred Alternative.

4.1.6.3 North Segment

The No-Build Alternative would continue to route both through-traffic and industrial traffic on Church Street through the central part of the City. Failure to improve the STH 26 route through Watertown would ultimately impede Watertown's ability to retain existing business and attract new businesses to the community.

In the North Segment, most of the planned business and industrial growth will occur on the west and south sides of the City, although there are scattered industries located throughout the central portion of the City, primarily along the Union Pacific Railroad corridor.

Alternative N1 improves access to existing and planned industrial sites on the west side of the City via the interchange with STH 19. This is one of the primary reasons that the City has approved a Resolution supporting a west side bypass (see letter in Appendix A).

Alternative N2 would improve access to existing industrial sites on the south and east sides of the City via the south interchange and the east interchange at STH 16. Alternative N2 provides very little benefits to the planned west side industrial district, where most of the industrial expansion will occur.

Alternative N1 was selected as the Preferred Alternative.

4.1.7 Residential and Neighborhood Impacts

Residential neighborhoods can be impacted by highway improvements in a variety of ways. The most direct impact can be the relocation of homes through acquisition to build the roadway. Other direct impacts include noise and other nuisances, loss of property value, loss of direct access, and pedestrian safety. Indirect impacts can be either positive or negative and may include impacts on the long-range attractiveness of areas for housing due either to improved access or impacts associated with the roadways and their proximity to housing.

Potential impacts to planned future residential neighborhoods can be mitigated by careful neighborhood planning before construction of either residential developments or the highway.

4.1.7.1 South Segment

Most of the residential neighborhood impacts in the South Segment would occur in developing subdivisions in the Janesville area, or in the eastern and northeastern parts of the City of Milton.

The No-Build Alternative would continue to direct increasingly heavy volumes of traffic on Janesville Road through the residential neighborhoods in the eastern portion of the City of Milton. This could lead to reduced property values near the road and increased nuisances such as noise and light. On the positive side, the No-Build Alternative would not result in relocations of residences, divide the proposed north side residential neighborhood or create the anticipated noise and other nuisance impacts to the rural residential neighborhood northeast of the City.

Alternatives S2, S3, and the No-Build Alternative begin immediately north of the Interstate 90 interchange on the north side of the City of Janesville and continue to the south side of the City of Milton along existing STH 26. WisDOT expanded this section of STH 26 to four lanes in 1999. Access to the surrounding neighborhoods is currently via at-grade intersections at Rotamer Road, McCormick Drive, Bingham Road, Valleyview Drive and Town Hall Road. WisDOT has studied access management for this section of roadway with affected units of government. Access within this section will be modified which could indirectly impact neighborhoods on the northeast side of the City of Janesville.

No additional residential relocations are required for the section of road between Janesville and the south side of Milton.

In the City of Milton, both Alternatives S2 and S3 route the highway on a bypass located approximately 3,500 feet (1,070 meters) east of the existing STH 26 corridor on Janesville Road. The central neighborhoods on the east side of the City would benefit from the relocated roadway.

Alternatives S2 swings northwesterly across the existing STH 26 corridor and crosses through the planned residential district on the north side of the City. The City is concerned that routing the highway through this future neighborhood area will impact future residents of the City and create a traffic barrier in the path of new development.

Alternative S2 would require the relocation of 47 residences. The residential relocations consist of 2 and 3-bedroom single-family homes and five 8-unit apartment buildings. Forty of the 47 residential relocations are apartment residences.

Alternative S3 continues northward east of the existing STH 26 corridor (Janesville Road). The route of Alternative S3 passes through the Reserve subdivision and near the Oak Ridge Estates and several other clusters of rural residences near the two golf courses on the northeast side of the City. Town of Milton officials have submitted a letter supporting Alternative S2 because of the potential impacts to the rural residences and subdivided land northeast of Milton (see Appendix A).

Alternative S3 requires the relocation of 11 residences. The residential relocations consist of 2 and 3-bedroom single-family homes. Four of these residential relocations come from a new rural subdivision called "The Reserve" subdivision, northeast of Milton.

Alternative S3 was selected as the Preferred Alternative. The route of Alternative S3 passes through the Reserve subdivision east of Milton and requires the relocation of all six houses within this newly developing subdivision. The location of the Preferred Alternative adjacent to the Storr's Lake Wildlife Area functions as a buffer between urban development and the wildlife area. The alternative will contain existing and future urban development from both the city and town of Milton entirely west of the roadway and open space/hunting grounds (Storr's Lake Wildlife Area) east of the roadway. Minor alignment shifts were made to further minimize overall environmental impacts. The Preferred Alternative will require the relocation of 15 residences.

4.1.7.2 Central Segment

In the Central Segment, most of the residential neighborhood impacts are in the rural areas outside the City of Jefferson. There are significant clusters of housing on the east side of the Rock River southeast of the City of Jefferson and a built-up rural neighborhood on the north side of the City of Jefferson near the intersection of Junction Road and STH 26. Most of the rural residences are on the west side of the existing STH 26 corridor.

The No-Build Alternative would require no residential relocations, but continuing traffic through the central part of the City of Jefferson would impact several neighborhoods in the City. This traffic has depressed residential property values along Main Street and contributes to the overall decline of housing in the central part of the City. The continuation of truck and through-traffic on Main Street would add to the current barrier to efficient pedestrian circulation, separating several residential districts from their closest schools, parks, and other neighborhood facilities.

Alternative C1 would require 9 residential relocations. Most of the residential neighborhood impacts would be in the vicinity of the north interchange.

Alternative C2 would lead to 5 residence relocations. Similar to Alternative C1, most of the residential neighborhood impacts would in the rural residential area north of the City of Jefferson. Alternative C2(a) and C2(b) would require 5 and 10 residential relocations, respectively.

Alternatives C1, C2, C2(a), and C2(b) would cross the Jefferson County Farm Property. The highway would affect the residential neighborhood proposed for the area. The concept development plan for the Jefferson County Farm Property, if it is approved for implementation, would need to be revised if any of

these alternatives were selected. Alternatives C1 and C2 have different alignment (and interchange) locations through the Jefferson County Farm Property between the north Ft. Atkinson bypass interchange (Business 26) and CTH W. The two alignments are interchangeable with each other. Alternatives C2, C2(a), and C2(b) each have a different alignment location between CTH W and CTH J through the Jefferson County Farm Property.

Alternative C3 would require 13 residence relocations (Table 4.1.8). Most of the residential neighborhood impact would be to the rural residential neighborhood along the east side of the Rock River southeast of the City of Jefferson. Alternative C4 would require 6 residential relocations.

Alternative C2(a) was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. This alternative will now result in the relocation of 4 residences.

4.1.7.3 North Segment

Residential impacts in the North Segment would occur primarily in the rural residential neighborhoods on the outskirts of Watertown.

While the No-Build Alternative would not require any residential relocations, the continuation of the STH 26 corridor along Church Street would impact several central City neighborhoods by continuing to route heavy truck traffic and through-traffic on City streets. The existing route through the City depresses property values and contributes to the overall decline of several central city neighborhoods. The highway forms a major barrier for pedestrians between residential neighborhoods and nearby parks and schools.

Alternative N1 would impact individual rural residences along CTH Y, CTH A, Horseshoe Road, and CTH T where grade separation structures would be constructed. There would be 19 residential relocations.

Alternative N2 would impact rural residential neighborhoods along CTH X and CTH E and residences on both sides of the Rock River southeast of the City of Watertown. There would be relatively little neighborhood impact along the section of Alternative N2 that utilizes the existing portion of STH 16 on the northeast side of the City of Watertown. Alternative N2 would require a total of 24 residential relocations.

Both Alternatives N1 and N2 would potentially impact planned residential neighborhoods within the City's long-range urban service area. These impacts would be lessened by careful neighborhood planning. The City of Watertown considers Alternative N1 to have more beneficial neighborhood impacts since it improves access to several planned west side mixed-use neighborhoods.

Alternative N1 was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. This alternative will now result in the relocation of 19 residences.

4.1.8 Residential and Business Relocations

A residential and business relocation evaluation was done for the Build Alternatives to determine:

1. The approximate number of households, farms, and/or businesses that may be relocated by the project;

2. The probable availability of decent, safe, and sanitary replacement housing within the financial means of the households that may be affected by the project; and

3. An estimate of the possible total relocation assistance costs.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, provides for payment of just compensation for property acquired for a federal aid project. This includes a relocation program to assist displaced persons and businesses in finding comparable housing or commercial facilities.

A Conceptual Stage Relocation Plan was prepared for this project and a copy is attached in Appendix D. The results of the plan show that there do not appear to be any unusual circumstances regarding the residential or business relocations. This project will have minimal effect on the overall communities after the relocation process has been completed.

Before the initiation of any property acquisition activities, members of the WisDOT Real Estate Section will contact the property owners and tenants to explain the details of the acquisition process and Wisconsin's Eminent Domain Law under Wisconsin Statutes 32.05 and 32.19. Each relocatee will be interviewed by the relocation agent for the purpose of determining their needs, desires, and possible problems. One or more professional appraisers will inspect any property acquired. Property owners may accompany the appraiser during the inspection. Provisions for independent property owner appraisals are also provided. Based on the appraisal(s) made, the value of the property would be determined and that amount offered to the owner.

In addition to providing for payment of "fair market value" for property acquired, additional benefits are available to eligible displaced persons required to relocate from their residence, business, or farm. These additional benefits include supplemental replacement costs, moving expenses, increased rental or mortgage payments, closing costs, and other valid relocation costs. Supplemental replacement cost is the additional cost above the "fair market value" of the property to find comparable replacement property (home or business) in the area. All the above resources are available to all displacees without discrimination.

With the exception of the time during construction, no substantial disruption effects should exist. Since all relocatees are expected to remain in the area, only the actual business and residential relocatees will be affected.

Real estate acquisition for the STH 26 Corridor project between Janesville and Watertown would typically take place one to two years prior to construction. Because of the long-term construction schedule (2008 or beyond), WisDOT will consider requests for early acquisition. To the extent practicable, properties involving relocations may also be acquired as they become available, and in view of replacement housing availability. There are no known concurrent city, state, or county relocation projects underway or planned in this area that would affect the availability of either business or residential replacement sites.

Neither minority status, age, nor income level indicate the need for special relocation consideration or services. If unusual problems were to arise, WisDOT relocation personnel would be available to provide the appropriate relocation services.

Table 4.1.8 documents the associated relocations per alternative. The estimated residential and business displacements are based on preliminary information regarding roadway width and location relative to abutting properties. As more detailed geometric and profile data become available during the project's engineering phase, the actual number of displacements may change. There will be no residential or business relocations under the No-Build Alternative.

Table 4.1.8.4-1 lists the adequate replacement housing available in the project area in the year 2004. The maximum estimated number of single-family homes to be displaced with the Preferred Alternative is 38. As shown in Table 4.1.8.4-2, the number of available single-family homes is greater than the maximum number of displacements for the preferred alternative along the entire corridor for the typical price ranges. An adequate supply of housing appears to be currently available.

Tables 4.1.8.4-3 and 4.1.8.4-4 list the available apartment and housing rental units. It appears that comparable replacement rental units will be available during the acquisition period for this project. Alternative S2 is the only alternative that impacts rental units, with five 8-unit rental apartment complexes affected. The rental apartments are two-bedroom apartments with rent approximately $450 per month. Currently, 53 two-bedroom apartments are available in the similar price range to accommodate the 40 rental tenants.

TABLE 4.1.8
SUMMARY OF RELOCATIONS

ALTERNATIVE	RELOCATIONS		TOTAL
	Residential	Business	
S2	47	2	49
S3	11	2	13
Preferred S3	15	4	19
C1	9	2	11
C2	5	3	8
C2(a)	5	4	9
Preferred C2(a)	4	2	6
C2(b)	10	5	15
C3	13	1	14
C4	6	0	6
N1	19	7	26
Preferred N1	19	1	20
N2	24	6	30

The number and type of residential and business relocations are described below for each of the project alternatives. The number of bedrooms for the residential relocations is only an estimate at this time, as no interior inspections were conducted. The price range of single-family homes to be relocated represents the typical price range of homes in the area in the year 2000 for detailed study alternatives and the year

2004 for the preferred alternative, as no individual appraisals were conducted. The locations of the relocations for the detailed study alternatives are shown in Exhibit 5 for the south segment, Exhibit 6 for the central segment, and Exhibit 7 for the north segment.

4.1.8.1 South Segment

Figure 4.1.8.1 shows the relationship between the number of residential and business relocations for each of the detailed study alternatives in the South Segment.

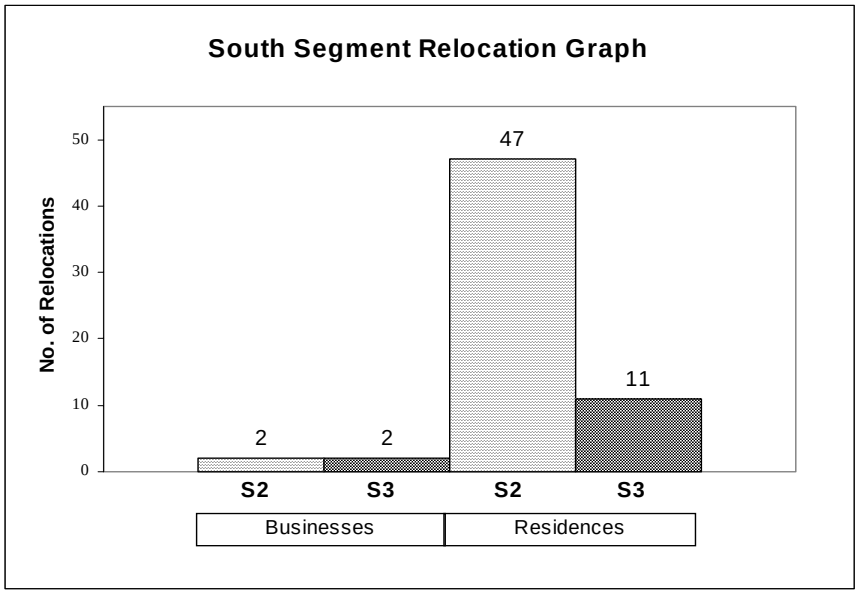


Figure 4.1.8.1 South Segment Relocation Graph

Alternative S2

Forty-seven residential and two business relocations would be required for Alternative S2. These relocations are shown on Exhibit 5, Sheets 2 through 4.

Seven of these relocations are single-family homes consisting primarily of 2 and 3-bedroom homes in the typical price range of the area ranging from $70,000 to $160,000. Forty of the residential relocations are located in five 8-unit rental apartment complexes. The rental apartments are two-bedroom apartments with rent approximately $450 per month.

There are a total of two businesses that would be affected by Alternative S2: a tool manufacturing shop and a supper club.

The tool manufacturing shop is located on the east end of the City of Milton's industrial park on STH 59. The property is zoned industrial. The shop employs 18 full-time employees and 1 part-time employee. The city has recently acquired property immediately south of STH 59 for expansion of their existing industrial park, and there would be several sites available within the industrial park for relocation of the shop.

The supper club is located at the intersection of STH 26 and CTH N in the Town of Milton. The club is situated in a rural setting, and employs 4 full-time and 8 part-time employees. The owner indicates that he would like to relocate in the same area since many of his patrons are from a localized area surrounding the club that also includes the resort areas of Lake Koshkonong. Currently, there is a vacant supper club tavern west on CTH N and along Lake Koshkonong that would be a suitable relocation site. In addition, there are at least 2 other commercial sites in the area.

Both of these business relocations would also be required under Alternative S3.

Alternative S3

Eleven residential and two business relocations would be required for Alternative S3. These relocations are shown on Exhibit 5, Sheets 2 through 4.

The eleven residential relocations are owner-occupied single-family homes. Four of these residential relocations come from a new rural subdivision called "The Reserve" subdivision, northeast of Milton. The homes in this new subdivision represent 3 or more bedroom owner-occupied single-family residences with above average home prices for the area ranging from $250,000 to $350,000. The other seven residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $70,000 to $160,000.

Alternative S3 would affect the same two businesses as described above under Alternative S2.

Alternative S3 was selected as the Preferred Alternative. This alternative includes the modification of access within the existing four-lane section of STH 26 between Janesville and Milton. Minor alignment shifts were made to further minimize overall environmental impacts. As a result of these changes, this alternative will require 15 residential and 4 business relocations. These relocations are shown on Exhibit 8 Sheets 1 through 8. See Appendix D for a copy of the conceptual stage relocation plan.

Fifteen residential relocations would be required for Preferred Alternative S3. The residential relocations are owner-occupied single-family homes. Six of these residential relocations come from a new rural subdivision called "The Reserve" subdivision northeast of Milton. The homes in the new subdivision represent 3 or more bedroom owner-occupied single-family residences with above average home prices for the area ranging from $250,000 to $400,000. The other nine residential relocations represent 2 and 3-bedroom single-family owner-occupied homes in typical price ranges for the area ranging from $70,000 to $200,000.

There are a total of four businesses that would be affected by Preferred Alternative S3: a kitchen and bath store, a garden shop and nursery, a tool manufacturing shop, and a supper club.

The kitchen and bath store is located at the intersection of STH 26 and McCormick Road near Janesville. The store offers both sales and remodeling services. The store employs 6 full-time employees. There are several sites available in the immediate area for relocation of the store.

The garden shop and nursery is located at the intersection of STH 26 and McCormick Road near Janesville. The retail garden shop is impacted by the proposed project, and the majority of the nursery would remain intact. The business employs 8 full-time employees and 10 part-time employees. There are vacant parcels adjacent and near to the nursery for relocation of the retail shop.

The tool manufacturing shop is located on the east end of the City of Milton's industrial park on STH 59. The property is zoned industrial. The shop employs 18 full-time employees and 1 part-time employee. The city has recently acquired property immediately south of STH 59 for expansion of their existing industrial park, and there would be several sites available within the industrial park for relocation of the shop.

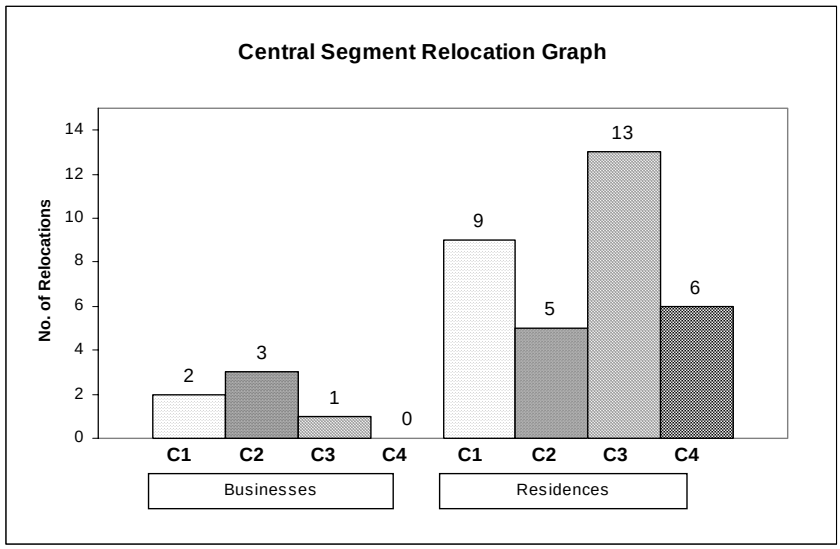
The supper club is located on STH 26 in the Town of Koshkonong. The club is situated in a rural setting, and employs 4 full-time and 8 part-time employees. The owner indicates that she would like to relocate in the same area since many of his patrons are from a localized area surrounding the club that also

includes the resort areas of Lake Koshkonong. Currently, there is a vacant supper club tavern west on CTH N and along Lake Koshkonong that would be a suitable relocation site. In addition, there are at least 2 other commercial sites in the area.

It is anticipated that there would not be any adverse affect on the local economy due to the relocation of these businesses.

4.1.8.2 Central Segment

Figure 4.1.8.2 shows the relationship between the number of residential and business relocations for each of the detailed study alternatives in the Central Segment.



Note: Modification C2(a) has 4 business and 5 residential relocations.
Modification C2(b) has 5 business and 10 residential relocations.

Figure 4.1.8.2 Central Segment Relocation Graph

Alternative C1

Nine residential and two business relocations would be required for Alternative C1. These relocations are shown on Exhibit 6, Sheets 3 through 8.

The nine residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in the typical price range for the area ranging from $65,000 to $170,000.

There are a total of two businesses that will be affected by Alternative C1: a concrete plant and a tavern.

The concrete plant is located at the intersection of STH 89 (south) and USH 18 in the Town of Jefferson just west of the City of Jefferson. The plant is one of several concrete plants owned by the same company in the area, and employs 14 full-time employees and 1 part-time employee. There is vacant land adjacent to the concrete plant that would be suitable for relocation.

The tavern is located at the intersection of STH 26 and Junction Road in the Town of Aztalan just north of the City of Jefferson. The tavern is in a rural setting, and employs 3 full-time and 5 part-time employees. The owner has recently acquired 7 acres nearby on which he plans to relocate and expand their business.

Alternative C2

Five residential and three business relocations would be required for Alternative C2. These relocations are shown on Exhibit 6, Sheets 3 through 8.

The five residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $65,000 to $170,000.

There are a total of three businesses that would be affected by Alternative C2: a flooring store, a used car sales lot, and a tavern.

The flooring store is located on STH 26 in the Town of Jefferson about one-quarter mile south of the City of Jefferson. The owner-occupied store employs 1 full-time employee and 1 part-time employee. There are 3 to 4 vacant parcels of land zoned commercial in the area that would be suitable sites for relocation.

The used car sales lot is adjacent to the flooring store on STH 26 described above. The owner-occupied business employs 2 full-time and 2 part-time employees. There are 3 to 4 vacant parcels of land zoned commercial in the area that would be suitable sites for relocation.

The tavern is described above under Alternative C1.

Alternative C2(a)

The modification of Alternative C2 west of the City of Jefferson, referred to as C2(a), would have a total of five residential and four business relocations.

The five residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $65,000 to $170,000.

Alternative C2(a) would affect four businesses: a flooring store, a used car sales lot, a tavern, and a farm implement lot.

The flooring store, used car sales lot, and the tavern are described above under Alternative C2.

The farm implement lot is located in the Town of Jefferson on USH 18 just west of the City of Jefferson. The owner-occupied business employs 5 full-time and 1 part-time employees. The business conducts primarily repair services. The owner has vacant land adjacent to the business that would be a suitable site for relocation.

Alternative C2(a) was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. As a result of these changes, this alternative will require 4 residential and 2 business relocations. These relocations are shown on Exhibit 8, sheets 9 through 15. See Appendix D for a copy of the conceptual stage relocation plan.

Four residential relocations would be required for Preferred Alternative C2(a). The residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $70,000 to $200,000.

There are a total of two businesses that would be affected by Preferred Alternative C2(a): a farm implement lot, and a tavern.

The farm implement lot is located in the Town of Jefferson on USH 18 just west of the City of Jefferson. The owner-occupied business employs 5 full-time and 1 part-time employees. The owner has vacant land adjacent to the business that would be a suitable site for relocation.

The tavern is located at the intersection of STH 26 and Junction Road in the Town of Aztalan just north of the City of Jefferson. The tavern is in a rural setting, and employs 3 full-time and 5 part-time employees. The owner has recently acquired 7 acres nearby on which he plans to relocate and expand their business.

It is anticipated that there would not be any adverse affect on the local economy due to the relocation of these businesses.

Alternative C2(b)

The modification of Alternative C2 west of the City of Jefferson, referred to as C2(b), would have a total of ten residential and five business relocations.

The ten residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $65,000 to $170,000.

Alternative C2(b), a modification of Alternative C2, would affect five businesses: a flooring store, a used car sales lot, a tavern, a church, and a resale shop.

The flooring store, used car sales lot, and the tavern are described above under Alternative C2.

The church is located on USH 18 in the City of Jefferson. The non-profit business employs 1 full-time and 2 part-time employees. There are 4 to 5 vacant parcels of land of adequate size in the surrounding area that would be suitable as relocation sites.

The resale shop is located on USH 18 in the City of Jefferson. The shop employs 2 full-time and 1 part-time employees. There are 2 to 3 vacant buildings in the surrounding area that would be suitable relocation sites.

Alternative C3

Eleven residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $65,000 to $170,000 and two relocations are group homes owned by St. Coletta of Wisconsin.

There is a total of one business that would be affected by Alternative C3: a greenhouse. The greenhouse is located on the north side of USH 18 just east of the City of Jefferson. The greenhouse employs 7 full-time and 10 part-time employees. The relocation of the greenhouse may need special consideration relating to the location of the business. This business is owned and operated by St. Coletta of Wisconsin, an adult service agency that provides for the needs (schooling, medical care, training, work, etc.) of adult developmentally disabled individuals, and some of the assistants are St. Coletta residents. The greenhouse would need to be relocated on or near the St. Coletta property in order to remain in close proximity to its residents. St. Coletta officials have indicated they have property available for relocation.

Alternative C4

Six residential and no business relocations would be required for Alternative C4. These relocations are shown on Exhibit 6, Sheets 3 through 8.

The six residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $65,000 to $170,000.

4.1.8.3 North Segment

Figure 4.1.8.3 shows the relationship between the number of residential and business relocations for each of the detailed study alternatives in the North Segment.

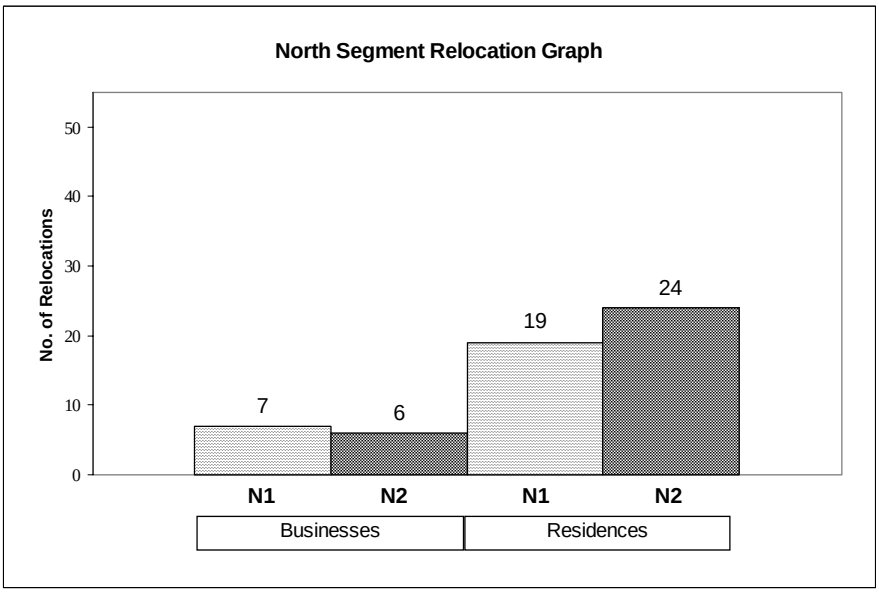


Figure 4.1.8.3 North Segment Relocation Graph

Alternative N1

Nineteen residential and seven business relocations would be required for Alternative N1. These relocations are shown on Exhibit 7, Sheets 1 through 9.

Eighteen of the residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $75,000 to $165,000. One residential relocation represents a 3 or more bedroom single-family home with above average price range for the area ranging from $250,000 to $350,000. Five of these relocations would also be required under Alternative N2.

There are a total of seven businesses that would be affected by Alternative N1: a monument company, a truck maintenance shop, an automobile repair shop, a bar fixture store, an electrical components shop, a motel, and a heating and ventilation company.

The monument company (grave markers) is located in the Town of Watertown on STH 26 about one-quarter mile south of the City of Watertown. This location is one of several sites owned by the company in the Midwest, and is the only site that is involved with the production of the monuments. The company employs 10 full-time and 10 part-time employees at this site. The owner would like to stay in the general area, and is currently examining property south of the existing site to which he plans to relocate.

The truck maintenance shop is located in the Town of Watertown on CTH Y south of the City of Watertown. This shop is a small maintenance and repair shop for trucks owned by a recycling company whose main facility is located in the City of Watertown (not affected by this project). The shop employs 1 full-time employee and 1 part-time employee. There are 3 to 4 vacant parcels of land in the area suitable for relocation sites.

The used car shop is located on Church Street (STH 26) in the City of Watertown. The shop employs 2 part-time employees. The small shop repairs older cars (generally one or two at a time) for resale. There are 4 to 5 parcels of land in the city suitable as relocation sites.

The bar fixture store is located on Church Street (STH 26) in the City of Watertown. The small store employs 1 full-time employee and 1 part-time employee. There is no inventory located at the site, and all orders are special orders delivered directly to a job site. There are no special requirements or needs for relocation of the business. There are 4 to 5 parcels of land in the city suitable as relocation sites.

The electrical components shop is located on Church Street (STH 26) in the City of Watertown. The shop has 1 full-time employee. This business is reducing its inventory and is expected to close down operations in the near future.

The heating and ventilation company is located on Church Street (STH 26) in the City of Watertown. The company has 8 full-time employees. The site is used for outside storage of trucks and equipment only, and no repairs are conducted at this location. The relocation of the business will require adequate outside storage space requirements. There are several vacant parcels in the city's industrial park that are suitable as relocation sites.

The motel is located in the Town of Emmet on STH 26 near the interchange of STH 16 just north of the City of Watertown. The motel has 2 full-time employees. The owners have indicated they own land adjacent to the motel and plan to relocate their business to that location.

Alternative N1 was selected as the Preferred Alternative. Minor alignment shifts were made to further minimize overall environmental impacts. In particular, the size and layout of the north interchange for the City of Watertown was modified. As a result of these changes, this alternative will require 19 residential and 1 business relocations. These relocations are shown on Exhibit 8, Sheets 16 through 24. See Appendix D for a copy of the conceptual stage relocation plan.

Nineteen residential relocations would be required for Preferred Alternative N1. The residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $80,000 to $200,000.

There is one business that would be affected by Preferred Alternative N1: a monument company.

The monument company (grave markers) is located in the Town of Watertown on STH 26 about one-quarter mile south of the City of Watertown. This location is one of several sites owned by the company in the midwest, and is the only site that is involved with the production of the monuments. The company employs 10 full-time and 10 part-time employees at this site. The owner would like to stay in the general area, and is currently examining property south of the existing site to which he plans to relocate.

It is anticipated that there would not be any adverse affect on the local economy due to the relocation of this business.

Alternative N2

Twenty-four residential and six business relocations would be required for Alternative N2. These relocations are shown on Exhibit 7, Sheets 1 through 9.

The twenty-four residential relocations represent 2 and 3-bedroom single-family owner-occupied houses in typical price ranges for the area ranging from $75,000 to $165,000. Five of these relocations are also required under Alternative N1.

There are a total of six businesses that will be affected by Alternative N2: a monument company, two motels, a warehouse storage business, a tavern, and a molding company.

The monument company is described above under Alternative N1.

One motel is described above under Alternative N1.

The second motel is located along STH 16 on the northeast side of the City of Watertown. The motel employs 1 full-time and 3 part-time employees. The owners have indicated they would like to get out of the motel business, and it is unlikely they would want to relocate to another site.

The warehouse storage business is located along STH 16 on the northeast side of the City of Watertown. The business is a storage building for a local bicycle maker, and employs 1 full-time employee. There are several vacant parcels of land in the city's industrial park suitable as relocation sites.

The tavern is located in the Town of Emmet on STH 26 just south of Kiln Road. The tavern is in a rural setting, and employs 1 full-time and 2 part-time employees. The owner would like to stay north of the City of Watertown in a rural setting. There are 1-2 vacant parcels of land north of the city zoned commercial that are suitable relocation sites.

The molding company is located in the Town of Emmet on STH 26 just south of Kiln Road. The company manufactures molding products at a separate site in the City of Watertown. This specific site is one of several storage shed sites used by the company as a storage facility for their products, and has no employees on site. There are several vacant parcels of land in the city's industrial park suitable as relocation sites.

4.1.8.4 Available Replacement Housing

Single-Family Houses

A survey of comparable replacement housing was made for each of the three project segments to determine whether replacement housing is available for the persons to be displaced. All residential properties were assumed to be owner occupied unless identified as rental property or apartments. Information was based on data contained in classified advertisements and on the Internet along and surrounding the STH 26 corridor. Residences that are part of farming operations would likely be re-established on the farmstead.

Table 4.1.8.4-1 lists the adequate replacement housing available in the project area in the year 2004. The Preferred Alternative will displace 38 single-family homes. As shown below in Table 4.1.8.4-2, the number of available single-family homes is greater than the maximum number of displacements along the entire corridor for the typical price ranges. An adequate supply of housing appears to be currently available.

TABLE 4.1.8.4-1
AVAILABLE REPLACEMENT HOUSING
Single-Family Homes For Sale (July 2004)

Price Range	2 Bedrooms	3 Bedrooms	4 Bedrooms
$70,000 – $90,000	3	2	1
$90,000 – $110,000	8	7	3
$100,000 – $130,000	11	26	3
$130,000 – $150,000	3	13	6
$150,000 – $175,000	1	14	10
$175,000 – $200,000	0	17	6
$200,000 – $250,000	1	25	17
$250,000 - $300,000	1	16	18
$300,000 - $500,000	2	4	9
Totals	30	124	73

Source: Classified Advertisements and Multiple Listing Service

TABLE 4.1.8.4-2
MAXIMUM ESTIMATED NUMBER OF DISPLACEMENTS VS.
AVAILABLE REPLACEMENT HOUSING
Single-Family Homes (July 2004)

Price Range	Maximum Number of Estimated Displacements for Project	Available Replacement 2 to 4-Bedroom Housing
$70,000 – $250,000	32	177
$250,000 – $500,000	6	50

Rental Units and Group Homes

Houses and apartments in the study area generally rent from a low of $200 to a high of $1,000 per month in the year 2000. The average rent for a two-bedroom or three-bedroom rental unit is $600 and $700 per month, respectively. Tables 4.1.8.4-3 and 4.1.8.4-4 list the available apartment and housing rental units.

It appears that comparable replacement rental units will be available during the acquisition period for this project. Along Alternative S2, five 8-unit rental apartment complexes would be impacted. The rental apartments are two-bedroom apartments with rent approximately $450 per month. Currently, 53 two-bedroom apartments are available in the similar price range to accommodate the 40 rental tenants.

Along Alternative C3 east of Jefferson, two group homes owned by St. Coletta of Wisconsin would have to be relocated. Since it is unlikely that these individuals could be relocated to comparable housing on the St. Coletta property, it is anticipated that two new group homes would have to be constructed. At this time it appears that property is available on the St. Coletta campus for the construction of these group homes.

TABLE 4.1.8.4-3
AVAILABLE APARTMENT RENTAL UNITS

Price Range	2 Bedrooms	3 Bedrooms
$200 - $400	3	0
$400 - $600	53	24
$600 - $800	54	14
$800 - $1000	18	11
Totals	128	49

TABLE 4.1.8.4-4
AVAILABLE HOUSE RENTAL UNITS

Price Range	2 Bedrooms	3 Bedrooms
$200 - $400	11	1
$400 - $600	197	8
$600 - $800	197	66
$800 - $1000	57	38
Totals	462	113

Source: Classified Advertisements

4.1.8.5 Available Replacement Businesses

Business displacements are estimated to occur with the project alternatives as shown in Sections 4.1.8.1, 4.1.8.2, and 4.1.8.3. This information was based upon a field survey and personal interviews with the businesses potentially affected by an alternative. Currently in the year 2004, adequate space for business relocations is available. With the current growth and development within the study area, it appears that replacement of businesses would also be available during the acquisition period. The general effect of the business relocations on the local economy is expected to be minimal as most of the businesses would likely relocate and become reestablished in the community.

The relocation of the greenhouse, located east of the City of Jefferson along Alternative C3, may need special consideration relating to the location of the business. This business is owned and operated by St. Coletta of Wisconsin and some of the assistants are St. Coletta residents. The greenhouse would need to be relocated on or near the St. Coletta property in order to remain in close proximity to the residents of St. Coletta. The remaining business displacements for the build alternatives have no known age, ethnic, minority, or handicapped characteristics that would require special consideration.

4.1.8.6 Summary of Relocation Costs

Table 4.1.8.6 summarizes the estimated residential and business relocation costs presented in the Conceptual Stage Relocation Plan in Appendix D.

Alternative S3 was selected as the Preferred Alternative in the South Segment, Alternative C2(a) was selected as the Preferred Alternative in the Central Segment, and Alternative N1 was selected as the Preferred Alternative in the North Segment. Minor alignment shifts were made to these alternatives to

further minimize overall environmental impacts. The estimated relocation costs for these alternatives are listed in Table 4.1.8.6.

TABLE 4.1.8.6
SUMMARY OF RELOCATION COSTS (2000 Dollars)
SUMMARY OF RELOCATION COSTS (2004 Dollars – Preferred Alternative)

Alternative	Residential Cost	Business Cost	Total Cost
S2	$565,350	$98,000	$663,350
S3	$319,550	$98,000	$417,550
Preferred S3	$435,750	$166,000	$601,750
C1	$261,450	$203,000	$464,450
C2	$145,250	$115,700	$260,950
C2(a)	$145,250	$150,700	$295,950
Preferred C2(a)	$116,200	$88,000	$204,200
C2(b)	$290,500	$199,900	$490,400
C3	$327,650	$58,000	$385,650
C4	$174,300	$0	$174,300
N1	$551,950	$362,700	$914,650
Preferred N1	$551,950	$70,000	$621,950
N2	$697,200	$359,000	$1,056,200

Note: The above costs do not include acquisition cost.

4.1.9 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order on Environmental Justice 12898. The Executive Order requires all federal agencies to address the impact of their programs with respect to environmental justice. The Executive Order states that, to the extent practicable and permitted by law, neither minority nor low-income populations may receive disproportionately high and adverse impacts as a result of a proposed project. It also requires that representatives of any low-income or minority populations that could be affected by the project in the community be given the opportunity to be included in the impact assessment and public involvement process.

There are no known impacts to low-income or minority populations for this project. Alternatives have been developed to avoid existing neighborhoods and business centers. Avoidance of these areas effectively limited negative impacts to the small percentage of dispersed low-income and minority populations that exist.

The public involvement process described in Section VII, Comments and Coordination, was inclusive of all residents and population groups in the study area and did not exclude any persons because of income, race, color, religion, national origin, sex, age or handicap.

4.1.9.1 Racial and Ethnic Minority Impacts

Based on the 1990 U.S. Census, the racial and ethnic composition of the entire STH 26 study area is 97.6 percent Non-Hispanic White, 1.3 percent Hispanic (all races), 0.5 percent Asian or Pacific Islander, 0.4 percent Black, and 0.3 percent American Indian (see Table 3.2.2-2 and Figure 3.2.2). Interviews with local officials and staff indicate that there are no known areas having a concentration of minority populations located within the study area. There are no areas within the study area where there are any measurable differences in the potential impacts on the minority population compared to the total population.

4.1.9.2 Low-Income Household Impacts

Household income and household characteristics are similar throughout the STH 26 study area. In 1997, the per capita person income was $19,123 in Dodge County, $21,848 in Jefferson County, and $22,915 in Rock County (see Table 3.2.3.2). In no jurisdictions, do the income levels deviate more than 10 percent from the County averages.

In terms of household characteristics (1990 U.S. Census data), the median value of owner-occupied housing in the total study area is $60,100 and the median contract rent is $297 (See Table 3.2.3.4-2). Interviews with local officials and staff indicate that there are no known areas having a concentration of low-income households located within the study area. There are no areas within the study area where there are any measurable differences in the potential impacts on the low-income population compared to the total population.

In summary, this project will not have disproportionately high and adverse impacts on either minority or low-income populations. This document is therefore in compliance with U.S. DOT and FHWA policies to determine whether a proposed project will have induced socioeconomic impacts or any other adverse impacts on minority or low-income populations; and it meets the requirements of Executive Order on Environmental Justice 12898 – "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations".

4.2 ENVIRONMENTAL AND RELATED RESOURCE IMPACTS

4.2.1 Lakes, Rivers and Streams

Stream crossing locations for the various alternatives were observed and evaluated during a field reconnaissance. The stream crossing locations were evaluated on the extent of riparian wetlands that would be impacted, the amount of floodplain that would be impacted, the quality and stability of natural stream banks, and the type of bottom substrate. Higher ratings indicate higher levels of impact to the characteristic if this alternative were selected. Direct impacts to wetlands and floodplains are further discussed in Section 4.2.2 and 4.2.3, respectively.

No surface water lakes will be impacted by any alternative being studied.

Potential impacts to surface water resources are associated with the construction, operation, and maintenance of the proposed roadway. Potential impacts to surface water resources may result from increased siltation to streams, increased flooding, decreased wildlife and aquatic habitat, decreased water quality, and introduction of exotic species.

Surface water resources may be impacted by erosion of roadside banks, erosion of riverbanks, and stirring of sediments during construction of the proposed roadway. Siltation may increase turbidity, which may potentially impact aquatic plants by interfering with photosynthesis. Siltation may also decrease the number of fish spawning areas by adding silt to the substrate. The addition of silt to the substrate may also impact aquatic macroinvertebrates.

Bridge spans may reduce surface water habitat by shading sections of streams from direct sunlight. Habitat could also change by increasing the flow of the streams if the channel is constricted or the slope of the stream bottom is changed during construction.

Potential impacts associated with operation and maintenance of the proposed roadway may include chemical pollution from motor vehicles, which have the potential to affect the water quality, vegetation, and associated aquatic organisms. Substances include grease and petroleum products from lubricant and fuel spills or leaks, antifreeze and hydraulic fluid, and zinc, which is used as a tire filler and motor oil stabilizer.

Throughout the mid-1980s, the FHWA conducted extensive nationwide studies to determine highway runoff constituents, amounts relative to roadway types and traffic conditions, and the potential impacts to surface water resources (*Pollutant Loadings and Impacts from Highway Stormwater Runoff*, *Volume 1*, Federal Highway Administration, April 1990).

FHWA's research concluded that pollutants in highway runoff are not present in amounts sufficient to threaten surface or groundwater where Average Daily Traffic (ADT) volumes are below 30,000. These findings are also cited by the Environmental Protection Agency in their report: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, EPA Publication 840-B-92-002, January 1993.

Table 4.2.1 lists the FHWA study results for pollutant concentrations in highway runoff for highways with ADT volumes under 30,000 and over 30,000.

TABLE 4.2.1
POLLUTANT CONCENTRATIONS IN HIGHWAY RUNOFF

Pollutant	Event Mean Concentration (mg/L), ADT Less Than 30,000	Event Mean Concentration (mg/L), ADT More Than 30,000
Suspended Solids	41	142
Lead	0.080	0.400
Zinc	0.080	0.329
Copper	0.022	0.054

Note:
Event Mean Concentrations were derived by averaging concentrations from several storm events.

In order to put the above-noted pollutant concentrations in perspective, the USEPA acute toxicity threshold levels for human health are 0.477 mg/L for lead, 0.800 mg/L for zinc, and 0.065 mg/L for copper. The values shown Table 4.2.1 are under these levels for both roadway categories.

As regards pollutant threshold levels that may cause adverse impacts to aquatic life, the FHWA concluded that:

- Pollutants in runoff for highways with less than 30,000 ADT, and without runoff abatement, will not cause adverse effects to aquatic life.

- Pollutants in runoff for highways with more than 30,000 ADT have the potential, without runoff abatement, for adversely affecting aquatic life.

Existing and projected ADT volumes in the study area are not expected to exceed 30,000 ADT in the design year. Regardless of future ADT volumes, highway runoff abatement measures would be incorporated into all of the detailed study build alternatives in accordance with Wisconsin Administrative Code Chapter TRANS 405 – Construction Site Erosion control and Stormwater Management Procedures. Specific measures would need to be developed during the project's engineering phase, based on more design detail and hydraulic data.

Deicing salts, frequently used on state highways in winter, may impact water quality by increasing the chloride levels during runoff and snowmelt. Impacts from deicing salt are associated with salt movement away from the proposed roadway via drainage ditches and toward receiving surface water resources.

If construction equipment was previously used in infected waters and was not properly cleaned before use on current projects, exotic species, such as zebra mussels, purple loosestrife, and Eurasian water milfoil may be introduced into the surface waters. These exotic species have no natural predators in Wisconsin, so they are able to crowd out native organisms, which can alter the entire food chain.

4.2.1.1 South Segment

Alternatives S2 and S3 would use the same stream crossing of Otter Creek along the existing STH 26 alignment just south of CTH N. This is the preferred crossing location because there is already disturbance from the existing crossing. As Table 4.2.1.1 shows, there is not a large wetland area along the shoreline, the stream banks are steeply sloped in this location so the floodplain is not extensive, and the banks are not natural due to the existing highway crossing.

The modification to the Preferred Alternative S3 results in crossing Otter Creek approximately 2,000 feet (610 meters) east of the existing STH 26 crossing. This alignment shift was a result of agency comments to avoid the sensitive Otter Creek Springs natural community. The new crossing location has similar stream features as the current crossing.

The Preferred Alternative S3 passes through one newly developing subdivision that is adjacent to the Storr's Lake Wildlife Area. Currently, the majority of lots are vacant. WisDOT will purchase the entire subdivision in order to provide a 200-500 foot vegetated buffer strip between the new roadway and the wildlife area. The wildlife area contains two surface water lakes, Storr's Lake and Bower's Lake. These surface water lakes will not be directly impacted by the Preferred Alternative, and the vegetated strip will minimize potential indirect impacts. Section 4.6.4 contains a more detailed discussion on the buffer strip.

TABLE 4.2.1.1
SOUTH SEGMENT STREAM CROSSINGS

Alternative	Stream	Shoreland Wetlands	Floodplain	Natural Banks	Bottom Substrate
S2 and S3	Otter Creek	Low	Low	Low	Rocky

4.2.1.2 Central Segment

Alternatives C1, C2, C2(a), C2(b), C3, and C4 would use the same stream crossing location of the Rock River at Fort Atkinson. This is the preferred Rock River crossing location because it is at the same location as the recently constructed Fort Atkinson bypass. The proposed alternatives would add another lane next to the existing lane within the previously impacted bypass corridor, which would minimize impacts to riparian wetlands, stream banks and the Rock River floodplain.

Alternatives C1, C2, C2(a), C2(b), C3, and C4 have four potential stream crossing locations. Alternatives C1 and C2 each cross the Crawfish River west of Jefferson at different locations and cross the Rock River north of Jefferson at the same location, while Alternatives C3 and C4 cross the Rock River south of Jefferson at the same location. The two slight modifications of Alternative C2 west of the City of Jefferson, referred to as C2(a) and C2(b), offer two different crossing locations of the Crawfish River. As presented in Table 4.2.1.2, the Alternative C1 would result in low impacts to riparian wetlands and floodplain areas and high impacts to natural stream banks of the Crawfish River. Alternative C2 would result in medium impacts to riparian wetlands and high impacts to floodplain areas and natural stream banks of the Crawfish River. The West Bypass Alternatives crossing of the Rock River would result in low impacts to riparian wetlands and floodplain areas and high impacts to natural stream banks. The East Bypass Alternatives crossing location of the Rock River has low impacts to shoreland wetlands and floodplain areas, but has high impacts to natural stream banks.

TABLE 4.2.1.2
CENTRAL SEGMENT STREAM CROSSINGS

Alternative	Stream	Shoreland Wetlands	Floodplain	Natural Banks	Bottom Substrate
C1, C2, C2(a), C2(b), C3, C4	Rock River @ Fort Atkinson	Low	Medium	Low	Likely Muck
C1, C2, C2(a), C2(b)	Rock River @ Jefferson	Low	Low	High	Likely Muck
C1	Crawfish River	Low	Low	High	Mucky
C2	Crawfish River	Medium	High	High	Mucky
C2(a)	Crawfish River	Low	High	High	Mucky
C2(b)	Crawfish River	Medium	Medium	High	Mucky
C3, C4	Rock River @ Jefferson	Low	Low	High	Likely Muck

4.2.1.3 North Segment

The North Segment has two alternative stream crossings of the Rock River near Watertown. Alternative N1 crosses the Rock River southwest of Watertown, and Alternative N2 crosses the Rock River southeast

of Watertown. As Table 4.2.1.3 shows, both alternatives will result in medium impacts to riparian wetlands and natural stream banks. Alternative N1 will result in medium impacts to the floodplain, while Alternative N2 will result in low floodplain impacts.

TABLE 4.2.1.3
NORTH SEGMENT STREAM CROSSINGS

Alternative	Stream	Shoreland Wetlands	Floodplain	Natural Banks	Bottom Substrate
N1	Rock River	Medium	Medium	Medium	Likely Muck
N2	Rock River	Medium	Low	Medium	Likely Muck

4.2.2 Wetlands

4.2.2.1 General

The alternatives will potentially directly impact wetlands by converting them to roadways. The alternatives may also indirectly affect wetlands by altering water depths and velocities within the floodplain and wetland areas during flood events. The project will potentially impact the water quality function of wetland areas by reducing the surface area of the wetland. The wetland shoreline protection function may be slightly reduced, allowing the stream banks to erode more quickly. The project may directly impact the groundwater recharge or discharge ability of the wetland areas. The wetland areas directly impacted by the project will no longer serve an aesthetic function.

Impacts to wetlands may indirectly impact adjacent wetlands by converting them, increasing or decreasing runoff to them, or by constricting channels upgradient or downgradient from such wetlands. Such impacts could change the frequency and duration of the inundation in the wetlands, which may in turn impact the vegetative community and the wildlife that currently utilize the wetlands. If the present vegetative community cannot compete in the altered wetland, it may be replaced by a less desirable, invasive vegetative community, such as a monotypical stand of cattails, reed canary grass, or purple loosestrife, which has less wildlife value.

The tabulations of impacts presented in Sections 4.2.2.2 through 4.2.2.4 are based upon detailed study alternative corridor impacts obtained by comparing the proposed corridors with field verified wetland maps of the project area. The Preferred Alternative impacts are discussed in Section 4.2.2.6.

4.2.2.2 South Segment

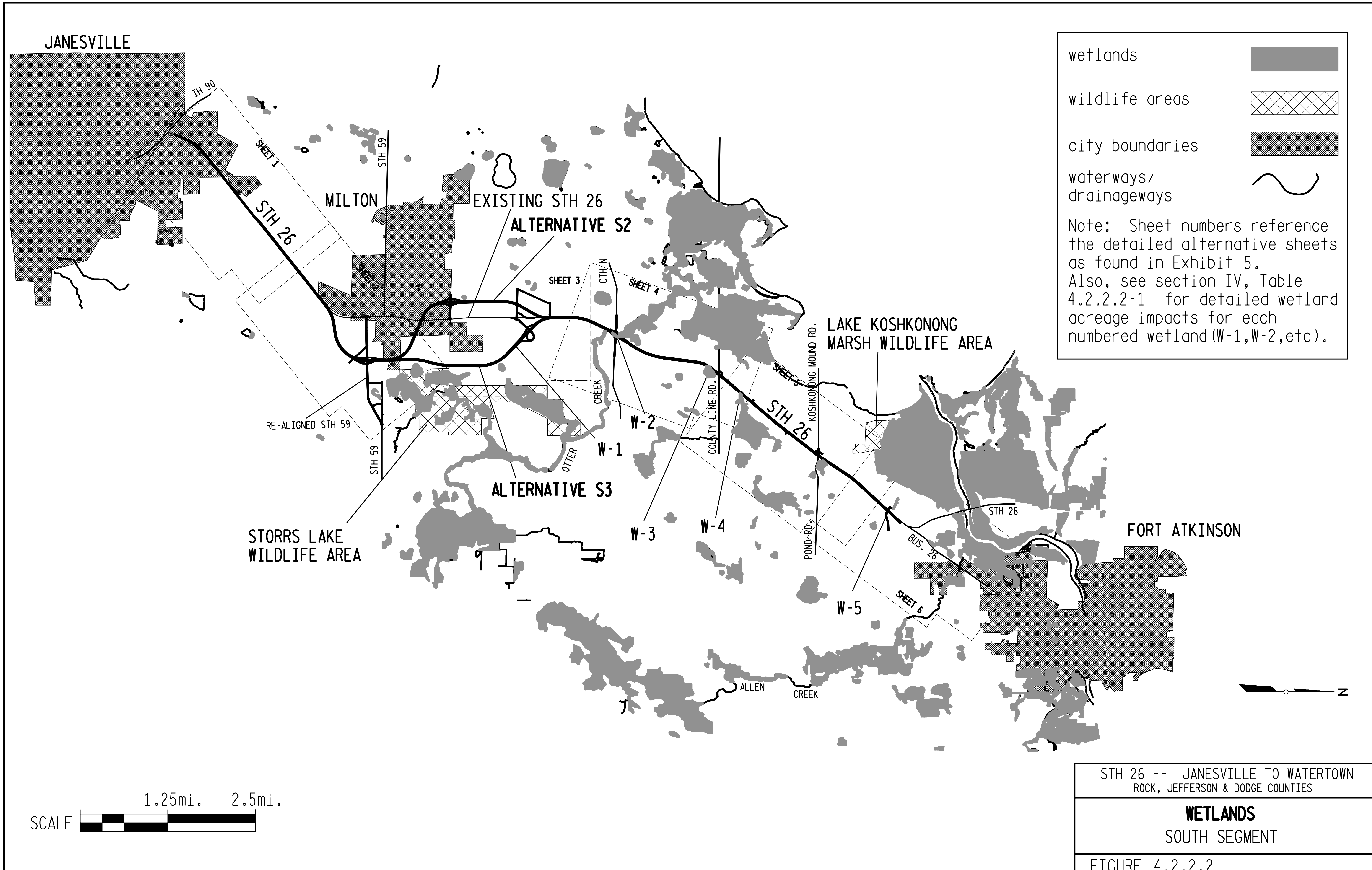
As shown in Table 4.2.2.2, Alternative S2 will have 5.7 acres (2.2 ha) of wetland impacts at 4 wetland areas (Figure 4.2.2.2) that were assessed to have low to high functional value. Alternative S3 would impact 5 wetland areas with approximately 6.7 acres (2.6 ha) of impacted wetland that was assessed to have low to high functional value.

TABLE 4.2.2.2
SOUTH SEGMENT WETLAND IMPACTS

Wetland ID	Station No.	Wetland Type	Wetland Size		Approximate Area Impacted		Functional Values
			Acres	Hectares	Acres	Hectares	
Alternative S2							
W-2	490	Wet Meadow	1350.0	546.3	1.8	0.7	Low-Medium
W-3	560	Shallow Marsh	13.8	5.6	2.3	0.9	Low-High
W-4	600	Wet Meadow	112.1	45.4	0.6	0.2	Low-Medium
W-5	750	Floodplain Forest	11.0	4.5	1.0	0.4	Low-Medium
		Total	1486.9	601.8	5.7	2.2	
Alternative S3							
W-1	380	Wet Meadow	1.0	0.4	1.0	0.4	Low
W-2	490	Wet Meadow	1350.0	546.3	1.8	0.7	Low-Medium
W-3	560	Shallow Marsh	13.8	5.6	2.3	0.9	Low-High
W-4	600	Wet Meadow	112.1	45.4	0.6	0.2	Low-Medium
W-5	750	Floodplain Forest	11.0	4.5	1.0	0.4	Low-Medium
		Total	1487.9	602.2	6.7	2.6	

4.2.2.3 Central Segment

As shown in Table 4.2.2.3 and Figure 4.2.2.3, Alternative C1 would impact seven wetland areas with approximately 23.6 acres (9.6 ha) of wetland, including 7.9 acres (3.2 ha) of floodplain forest assessed to have medium to high functional values. Alternative C2 would impact 8 wetland areas with approximately 19.4 acres (7.8 ha) of wetland including 8 acres (3.2 ha) of floodplain forest assessed to have medium to high functional values. Alternative C2(a) would impact 5 wetland areas totaling approximately 15.4 acres (6.2 ha) with the majority having low to medium functional values. Alternative C2(b) would impact 7 wetland areas totaling approximately 18.4 acres (7.4 ha) with the majority having low to medium functional values. Alternative C3 would impact 8 wetland areas with approximately 30.5 acres (12.3 ha) of wetland that was assessed to have low to medium functional values. Alternative C4 would result in the greatest wetland impacts, totaling 12 wetland areas with approximately 54.8 acres (22.1 ha). This would include 21 acres (8.5 ha) of floodplain forest that was assessed to have medium to high functional values.



STH 26 -- JANESVILLE TO WATERTOWN
ROCK, JEFFERSON & DODGE COUNTIES

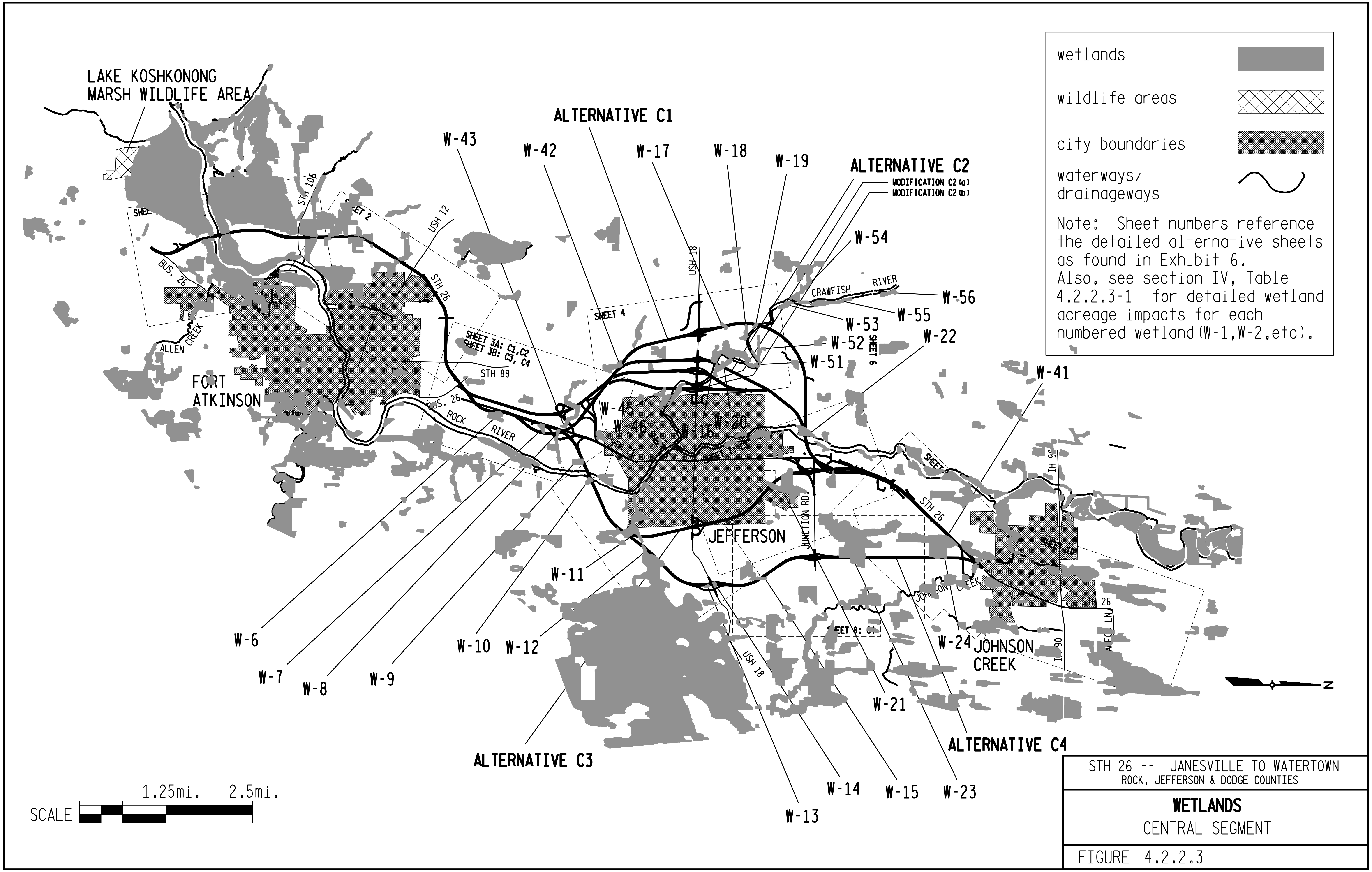
WETLANDS

SOUTH SEGMENT

FIGURE 4.2.2.2

EARTH TECH COMPUTER AIDED DESIGN & DRAFTING

DATE :Mon Dec 20 14:15:02 2004

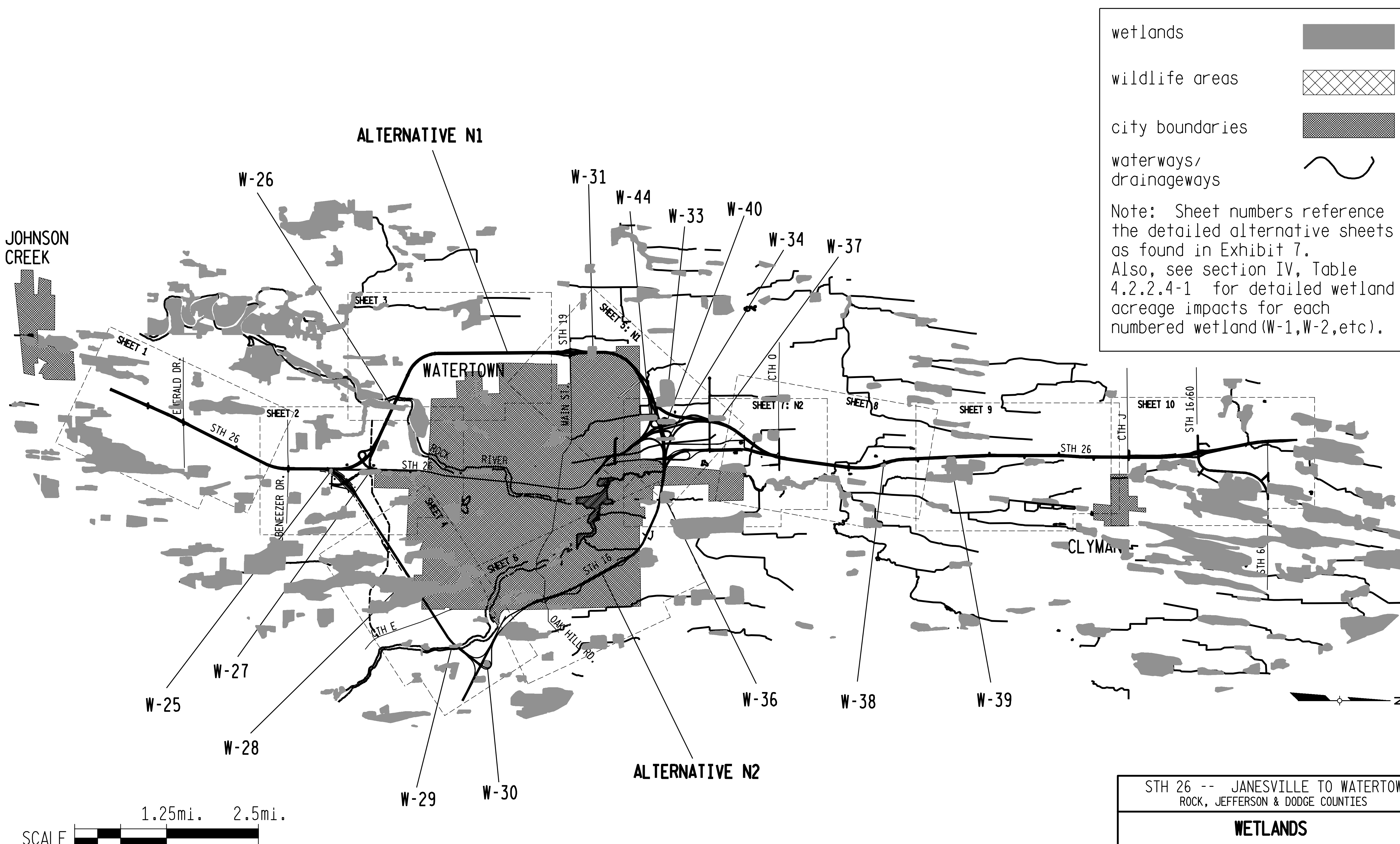


STH 26 -- JANESVILLE TO WATERTOWN
ROCK, JEFFERSON & DODGE COUNTIES

WETLANDS
CENTRAL SEGMENT

FIGURE 4.2.2.3

DATE :Mon Dec 20 14:06:54 2004



STH 26 -- JANESVILLE TO WATERTOWN
ROCK, JEFFERSON & DODGE COUNTIES

WETLANDS

NORTH SEGMENT

FIGURE 4.2.2.4

EARTH TECH COMPUTER AIDED DESIGN & DRAFTING

DATE :Mon Dec 20 14:07:02 2004

TABLE 4.2.2.3
CENTRAL SEGMENT WETLAND IMPACTS

Wetland ID	Station No.	Wetland Type	Wetland Size		Approximate Area Impacted		Functional Values
			Acres	Hectares	Acres	Hectares	
Alternative C1							
W-43	440	Wet Meadow	25.0	10.1	5.6	2.3	Low-Medium
W-42	490	Shrub-Carr	11.0	4.5	2.5	1.0	Low-Medium
W-17	580	Wet Meadow	9.2	3.7	1	0.4	Low
W-18	600	Wet Meadow	5.2	2.1	4.9	2.0	Low-Medium
W-19	610	Floodplain Forest	1.0	0.4	1	0.4	Low-Medium
W-22	710	Floodplain Forest	11.2	4.5	6.9	2.8	Medium-High
W-41	870	Wet Meadow	39.5	16.0	1.7	0.7	Low-Medium
		Total	102.1	41.3	23.6	9.6	
Alternative C2							
W-6*	380	Wet Meadow	9.9	4.0	3.0	1.2	Low-Medium
W-7*	420	Sedge Meadow	2.8	1.1	1.0	0.4	Low-Medium
W-8*	430	Wet Meadow	11.0	4.5	2.0	0.8	Low-Medium
W-42	510	Shrub-Carr	11.0	4.5	0.9	0.4	Low-Medium
W-16	580	Wet Meadow	38.5	15.6	1.3	0.5	Low-Medium
W-20	590	Wet Meadow	12.4	5.0	1.8	0.7	Low-Medium
W-22*	680	Floodplain Forest	11.2	4.5	8.0	3.2	Medium-High
W-41*	870	Wet Meadow	39.5	16.0	1.4	0.6	Low-Medium
		Total	136.3	55.2	19.4	7.8	
*Modification C2(a) would impact these wetlands for a total impact of 15.4 acres (6.2 ha).							
*Modification C2(b) would impact these wetlands in addition to W-45 (0.7 acre; 0.3 ha) and W-46 (3 acres; 1.2 ha) for a total impact of 18.4 acres (7.4 ha).							
Alternative C3							
W-6	380	Wet Meadow	9.9	4.0	3.0	1.2	Low-Medium
W-7	420	Sedge Meadow	2.8	1.1	1.0	0.4	Low-Medium
W-8	430	Wet Meadow	11.0	4.5	2.0	0.8	Low-Medium
W-9	470	Wet Meadow	8.3	3.4	3.0	1.2	Low-Medium
W-10	480	Forested Wetland	4.6	1.9	1.8	0.7	Low-Medium
W-11	530	Wet Meadow	61.5	24.9	8.4	3.4	Low-Medium
W-21	680	Wet Meadow	52.5	21.2	9.9	4.0	Low-Medium
W-41	870	Wet Meadow	39.5	16.0	1.4	0.6	Low-Medium
		Total	190.1	77.0	30.5	12.3	
Alternative C4							
W-6	380	Wet Meadow	9.9	4.0	3.0	1.2	Low-Medium
W-7	420	Sedge Meadow	2.8	1.1	1.0	0.4	Low-Medium
W-8	430	Wet Meadow	11.0	4.5	2.0	0.8	Low-Medium
W-9	470	Wet Meadow	8.3	3.4	3.0	1.2	Low–Medium
W-10	480	Forested Wetland	4.6	1.9	1.8	0.7	Low-Medium
W-11	530	Wet Meadow	61.5	24.9	7.1	2.9	Low-Medium
W-12	570	Wet Meadow	3300.0	1335.5	11.9	4.8	Medium-High
W-13	610	Wet Meadow	2.3	0.9	2.0	0.8	Low
W-14	620	Floodplain Forest	2.3	0.9	2.0	0.8	Low-Medium
W-15	650	Wet Meadow	23.0	9.3	2.0	0.8	Low
W-23	740	Floodplain Forest	191.0	77.3	14.5	5.9	Medium-High
W-24	810	Floodplain Forest	59.0	23.9	4.5	1.8	Medium-High
		Total	3675.7	1487.6	54.8	22.1	

4.2.2.4 North Segment

As shown in Table 4.2.2.4 and Figure 4.2.2.4, Alternative N1 would result in impacts to 10 wetland areas totaling approximately 22.3 acres (9.0 ha). Alternative N2 would impact 8 wetland areas with approximately 20.7 acres (8.4 ha) of wetland impacts. The wetlands impacted by each alternative were assessed to have low to high functional values.

TABLE 4.2.2.4
NORTH SEGMENT WETLAND IMPACTS

Wetland ID	Station No.	Wetland Type	Wetland Size		Approximate Area Impacted		Functional Values
			Acres	Hectares	Acres	Hectares	
Alternative N1							
W-25	190	Wet Meadow	1.0	0.4	1	0.4	Low-Medium
W-26	260	Floodplain Forest	30.3	12.3	2.7	1.1	Low-Medium
W-31	440	Wet Meadow	8.8	3.6	4	1.6	Low
W-33	510	Wet Meadow	45.5	18.4	1	0.4	Low-Medium
W-34	520	Wet Meadow	4.0	1.6	4	1.6	Low
W-37	550	Wet Meadow	7.6	3.1	1.8	0.7	Low
W-38	690	Wet Meadow	1.0	0.4	1	0.4	Low
W-39	740	Wet Meadow	76.0	30.8	0.9	0.4	Low-High
W-40	520	Wet Meadow	7.0	2.8	1	0.4	Low
W-44	510	Wet Meadow	8.3	3.4	4.9	2.0	Low-Medium
		Total	189.5	76.8	22.3	9.0	
Alternative N2							
W-25	190	Wet Meadow	1.0	0.4	1	0.4	Low-Medium
W-27	220	Wet Meadow	8.3	3.4	5	2.0	Low-High
W-28	320	Shrub-Carr	172.3	69.7	7.8	3.2	Low-Medium
W-29	370	Floodplain Forest	3.1	1.3	2	0.8	Low-Medium
W-30	400	Wet Meadow	3.7	1.5	1	0.4	Low-Medium
W-36	600	Wet Meadow	35.3	14.3	2	0.8	Low
W-38	690	Wet Meadow	7.0	2.8	1	0.4	Low
W-39	740	Wet Meadow	8.3	3.4	0.9	0.4	Low-High
		Total	239.0	96.8	20.7	8.4	

4.2.2.5 Indirect Impacts to Wetlands

The project will indirectly affect 10 wetland areas along the Crawfish River upstream from Alternatives C2, C2(a), and C2(b) (Table 4.2.2.5) by slightly altering water depths and velocities in the floodway during major, infrequent flooding events. Floodplain impacts are discussed in more detail in Section 4.2.3.3. The project will create indirect impacts to floodplain wetlands by altering the water depths and velocities in the floodway during the 100-year storm event. Hydrologic impacts will be infrequent. The 100-year storm event is expected to raise water levels at the Crawfish River crossing approximately 0.08 feet (0.02 meters) (Alternatives C2 and C2(a), and approximately 0.04 feet (0.01 meters) (Alternative C2(b). Flow velocities during this event will increase from 2.3 feet per second (0.70 meters per second) to 3.0 feet per second (0.9 meters per second).

According to the WDNR Wisconsin Wetland Inventory maps, 90 percent of the wetlands along the Crawfish River upstream of the proposed crossing locations consist of forested wetlands, which are less likely to be impacted by a small rise in the water level for a short duration. The remaining 10 percent of the wetlands are mapped as wet meadow wetlands. Wet meadow wetlands are more likely to be affected by a rise in water levels, but a 0.08 foot (0.02 meter) rise for a few days will not likely affect upstream wet meadow wetlands. Since the occurrence rate of this storm is once every 100 years and the duration of

the high water is expected to be for a few days, the indirect hydrologic impacts from this type of storm on upstream wetlands are expected to be negligible under the build alternatives. Therefore, mitigation measures are proposed only for directly impacted wetlands.

TABLE 4.2.2.5
INDIRECT (HYDROLOGIC) WETLAND IMPACTS

Alternative	Site No.	Location Station	Area Indirectly Impacted	
			Acres	Hectares
South Segment				
S2	No Hydrologic Impacts			
S3	No Hydrologic Impacts			
Central Segment				
C1	No Hydrologic Impacts			
C2, C2(a), C2(b)	W-16	580	38.5	15.6
	W-18	600	5.2	2.1
	W-19	610	1.0	0.4
	W-50	600 (left)	6.4	2.6
	W-51	600 (left)	5.7	2.3
	W-52	600 (left)	9.1	3.7
	W-53	600 (left)	6.9	2.8
	W-54	600 (left)	10.5	4.2
	W-55	600 (left)	15.1	6.1
	W-56	600 (left)	3.0	1.2
		TOTAL	101.4	41.0
C3	No Hydrologic Impacts			
C4	No Hydrologic Impacts			
North Segment				
N1	No Hydrologic Impacts			
N2	No Hydrologic Impacts			

Notes:
For wetland sites not listed for a particular alternative, impacts are zero.
Does not include areas directly impacted.

4.2.2.6 Preferred Alternative Wetland Impacts

In October 2001, project biologists conducted a field delineation of the wetland boundaries and a qualitative assessment of the wetland functional values of wetlands along the Preferred Alternative corridor. The wetland delineation was completed in accordance with the procedures outlined in the USACE 1987 Wetland Delineation Manual.

The delineation included a review of previously completed wetland identifications, available background information, and a field reconnaissance. WDNR staff performed a field visit to evaluate the procedures employed during the field reconnaissance. The wetland boundaries were marked in the field with lath and survey flagging. A horizontal control survey was performed to locate the wetland boundaries for mapping and to calculate impacts to wetlands. Photographs were taken of the wetland areas. The data obtained from the wetland delineation is intended to represent a jurisdictional wetland boundary for the wetlands within the project area.